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ABSTRACT

THE PURPOSE OF THIS STUDY WAS TO EXPLORE WHETHER DIFFERENCES EXIST BETWEEN COMPETENT AND INCOMPETENT HIGH SCHOOL STUDENTS IN THEIR STYLES OF THINKING AND IN THEIR ATTITUDES TOWARD WHAT THEY CONSIDER TO CONSTITUTE SOCIALLY RESPONSIBLE BEHAVIOR. SOCIAL RESPONSIBILITY WAS MEASURED BY A SPECIALLY CONSTRUCTED SOCIAL RESPONSIBILITY TEST (SRT). THE HYPOTHESIS THAT LOW SRT SCORES WOULD BE RELATED TO LOWER INTEREST IN SCHOOL RELATED ACTIVITIES AND TO HIGHER SCORES ON A TEST MEASURING INTEREST IN YOUTH CULTURE (YC) PARTICIPATION WAS TESTED WITH A SAMPLE OF SOPHOMORE AND SENIOR BOYS AT A LARGE URBAN HIGH SCHOOL. ONLY MODERATE SUPPORT WAS OBTAINED FOR THE HYPOTHESIS. WHERE SIGNIFICANT RELATIONSHIPS BETWEEN SRT, YC, AND SCHOOL PERFORMANCE VARIABLES WERE OBTAINED, THEY WERE IN A PATTERN OF LOW SRT AND HIGH YC SCORES ASSOCIATED WITH MEASURES OF LOWER INTEREST AND PERFORMANCE IN SCHOOL. (AUTHOR/KJ)

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Report from the Project on Rehabilitation of Disadvantaged Youth in Respect to Basic Educational and Social Skills

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The Wisconsin Research and Development Center for Cognitive Learning focuses on contributing to a better understanding of cognitive learning by children and youth and to the improvement of related educational practices. The strategy for research and development is comprehensive. It includes basic research to generate new knowledge about the conditions and processes of learning and about the processes of instruction, and the subsequent development of research-based instructional materials, many of which are designed for use by teachers and others for use by students. These materials are tested and refined in school settings. Throughout these operations behavioral scientists, curriculum experts, academic scholars, and school people interact, insuring that the results of Center activities are based soundly on knowledge of subject matter and cognitive learning and that they are applied to the improvement of educational practice.

This Technical Report is from the Project on Rehabilitation of Disadvantaged Youth in Respect to Basic Educational and Social Skills, a former project in Program 1. General objectives of the Program are to generate new knowledge about concept learning and cognitive skills, to synthesize existing knowledge, and to develop educational materials suggested by the prior activities.

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ABSTRACT

Review of the relevant literature indicates that, apart from ability, scholastic drop-outs and under-achievers share many characteristics that distinguish them from their more persistent classmates. Prominent among these characteristics are: the inability to defer gratification, resentment toward authority, and excessive youth culture participation at the expense of adult-oriented patterns of socialization. The purpose of this study was to explore whether differences exist between competent and noncompetent high school students in their styles of thinking and in their attitudes toward what they consider to constitute socially responsible behavior.

For the purpose of the study, social responsibility was defined as the ability to anticipate the consequences of one's own actions and to account for one's own behavior. Social responsibility was measured by a specially constructed Social Responsibility Test (SRT). The SRT consists of ten situations, each designed to fit one of four theoretically important subscales of the test. Each situation consists of five cartoon-like illustrations showing five alternative responses to a basic conflict. Ss were asked to indicate how socially responsible they thought each of the five alternatives was as a means of resolving the conflict. Low SRT scores indicate low social responsibility, as measured by the SRT.

The hypothesis that low SRT scores would be related to lower interest in school related activities and to higher scores on a test measuring interest in youth culture (YC) participation was tested with a sample of sophomore and senior boys at a large urban high school. Though some support was obtained for the hypothesized relationships between SRT scores and measure of interest and competence in school, statements regarding the predictive effectiveness of the SRT are limited by two general considerations: (1) the effectiveness of the instrument is limited mostly to four of the ten picture sets; and (2) although the relationships in the sophomore and senior samples present similar patterns, clear relationships exist in the senior sample only.

Only moderate support was obtained for the hypothesis that low SRT scores are directly related to high YC scores. A total YC score was computed and found to be related to three of the ten picture sets, but only for the senior sample.

Some support was obtained for the hypothesized pattern of relationships among SRT, YC, and school performance variables. Where significant relationships were obtained, they were in a pattern of low SRT and high YC scores associated with measures of lower interest and performance in school. However, YC and SRT scores were found to be related to different school variables. High YC scores were related to high absences and lower credits, both measures of interest in school. In contrast, low SRT scores were found to be related to lower scholastic aptitude scores and to a greater liklihood of being enrolled in a

general rather than a college preparatory program. These are two measures that are more closely related to ability than interest. Thus, the relationship of the SRT to measures of academic ability and intelligence is also discussed.

I

INTRODUCTION

In no other country is a high school education so readily available or as highly emphasized as a minimal educational goal as in the United States. Yet, in spite of school and community efforts to convince students that to stay in school is in their best interest, each year over 40% of all students in the United States fail to complete high school (Lichter, Rapien, Seibert, & Sklansky, 1962). Furthermore, many of the students remaining in school do so only with marginal interest. These are the so-called "under-achievers," working below assessed capacity. The drop-out, the potential drop-out, and the under-achieving student all represent a vast waste of human potential and pose a serious problem to a society that places such a high premium on the general education of its citizens. The solutions to the problem are not simple. They call for a variety of approaches, such as experimentation with the curriculum, improved guidance techniques, work with parents and family, and an increased understanding of the characteristics that distinguish the drop-out and under-achiever from his more persistent classmates. It is particularly to the latter point that the theory, research, and discussion in the pages that follow have been addressed.

Characteristics of the Drop-Out and of the Academic Under-Achiever

The available literature on school drop-outs and academic under-achievers is fairly extensive, including several books and a large number of journal articles. A review of the literature on high school drop-outs is provided by Tessener and Tessener (1958). Peterson (1963) has reviewed and catalogued the highly contradictory results which have been shown in the literature on under-achievement. A collection of articles edited by Torrance and Strom (1965) deals with family, school, and social influences upon mental health, academic achievement and potential, and upon the school drop-out problem. Cervantes (1965), on the basis of interviews and TAT protocols, proposes that the drop-out is characterized by such traits as the inability to defer gratification, resentment of authority, and by excessive youth culture participation.

Lichter, *et al.* (1962) conducted a study conceived within a psychoanalytic framework upon 105 adolescents referred by the Chicago schools as potential drop-outs. Lichter reported that more than half of the drop-outs in their study had at least average intellectual ability to master a high school curriculum. Lichter attributed the major causes of leaving school to dependency and the inability to assume any sense of self-responsibility. He and his associates reported that most of the potential drop-outs were unhappy with school experiences, and that few of those planning to leave school were doing so in order to realize constructive goals.

Penty (1956) reports a study of reading ability and high school drop-outs. Not surprisingly, three times as many poor readers as good readers in her study left school before graduation, but she also reports that apart from reading ability, the next most important factor distinguishing students who dropped out of school from those who stayed to graduate was their own personal desire to graduate. This desire was attributed to the expectations and encouragements of parents, teachers, and counselors, as well as to these students' own expectations of obtaining a better job.

It may be concluded from these and other studies of school drop-outs and academic under-achievers that the large number of students who drop from school prior to graduation do so for reasons other than their lack of ability. These studies suggest that we must consider which attitudes and modes or strategies of thinking can be regarded as relatively adaptive or maladaptive academically and socially. The notion of adaptive ego-functions (Hartmann, 1958) and the socialization of competence (Inkeles, 1966) are particularly instructive on these points, and they are discussed below. Also among the topics discussed below are maternal teaching styles, self-concepts, and Kelly's (1963) theory of personal constructs. Consideration is also briefly given to theories of socialization and the concept of a separate youth culture. These are followed by a rationale for the research discussed in the remainder of this thesis.

Socialization and Cognitive Styles

Recently, Inkeles (1966) has stressed the view that while a great deal of attention has been given to the socialization of the infant as an organism, the "socialization of competence" has been relatively neglected. By "competence" Inkeles refers to the ability to attain and perform effectively not only in achieved and ascribed to statuses but in those statuses "which one might reasonably invent or elaborate for oneself." Inkeles contends that the formative processes of socialization - the means by which conceptual skills occur and the ages at which they emerge - have been studied much more extensively than individual and social class differences in modes of cognitive functioning - the styles of thinking and the amount and types of information possessed.

Inkeles presents a model of personality and suggests that the following elements in an accounting scheme are relevant to the development of competence: Aptitudes, skills (socialized aptitudes), information, motives, and cognitive modes of functioning. He suggests that among important skills are the telling and management of time and the command of language, especially in written form. In discussing motives, Inkeles suggests that needs for achievement and autonomy might be expected to be more adaptive and productive in middle-class competition than needs for affiliation and dependency.

According to Inkeles, certain criteria for a theory of socialization need to be set, and he sees the following considerations as especially important:

> If you have not first defined what is the quality of the adult you wish to understand, how do you know what to look for in the disciplining of the child when you study 'responsibility' and 'achievement?' And beyond responsibility, sociability and achievement, we still want to know about information, values, motives, skills, moral functioning, self-conceptions, cognitive, conative, and affective modes; about the ability to trust others and enter into enduring relationships of cooperation or undestructive competition; about images of and relations to authority figures, and the sense of membership in, and feeling of obligations to, the community (1966, p. 282).

This thesis has attempted to examine the relation of the questions Inkeles raises to the problem of academic under-achievement and disinterest; it has centered around the construct of "social responsibility," a construct drawing on many of the criteria Inkeles suggests. Social responsibility is more fully defined later, but it can be briefly defined here as the ability to detect the cues associated with accountability for one's behavior and the ability to anticipate the future consequences of one's actions. The literature cited in the sections which follow is intended to support the assumption that greater social responsibility is associated with effective classroom behavior and socialization in general. These sections deal with the origins of cognitive styles and with the psychological characteristics of the under-achiever and the potential drop-out.

Maternal Teaching Styles

Hess (1965; 1967) has proposed that the origins of the drop-out syndrome may be found in the preschool level in the transmission of maladaptive cognitive strategies resulting from inadequate maternal teaching styles. Hess suggests that maternal behavior is transmitted in three particular ways: (1) In the strategies used for controlling the child; (2) in the expressions of opinions about social institutions, particularly the school; and (3) the techniques used for transmitting information. Hess has found important class differences. As social class decreased, the discrepancy increased between mothers' aspirations for their children and their predictions of what their children would actually achieve.

Hess directed particular attention to the effect of the mother's use of language upon the formation of cognitive strategies in her children. Hess states: "It is apparent that the ability to communicate concepts, to share information, and to program a simple task is found least often in the low-income family situation" (1965, p. 21).

Hess proposes that the repeated use of these differing communication styles in different situations accounts in part for the social class differences in cognitive ability as the child enters and progresses through school. He thinks it is likely that mothers can be taught effective teaching styles to develop the cognitive facilities of their children and eventually to diminish the school drop-out problem. Presently resocialization by other adults is required.

Self-Concepts and Self-Esteem

A number of studies have shown that academic achievement is related to a well-defined self-concept. Though researchers agree on this relationship, the cause and the effect in the association of self-concept with achievement is confounded in a circular relationship. Shaw and White (1965) and Bowman (1965) attribute the origins of self-concepts, i.e., the feelings and attitudes a person has regarding himself, to the parents; and those authors imply that the quality of school performance is dependent on the quality of the student's self-concept. Shaw and White point out that self-concepts involve both self-definition and identification. They define identification as "an acquired cognitive response whose content is such that some of the attributes, motives, characteristics, and effective states of the model are a part of the subject's psychological organization" (1965, p. 10). Shaw and White concluded from student's self-ratings, ratings of their parents, and their parents' own self-ratings that achieving students identify more closely with the like-sexed parent than do under-achieving students. No such distinction could be made for under-achievers of either sex. Bowman (1965) has also suggested that parents are the primary source of children's self-concepts. He cites evidence to show that aiding parents to improve their children's self-concepts resulted in a corresponding improvement in their children's grade point averages.

Other researchers have emphasized the part played by school experiences in shaping self-concepts, especially self-esteem. Kagan (1966a) states that the child possesses a motive to differentiate and label himself in some unique way. Kagan proposes that the general societal emphasis on intellectual mastery results in most children choosing the school as their means of self-definition. Friedenberg states, "The most tragic thing that happens to lower status youngsters in school is that they learn to accept the prevailing judgment of their worth. They accept and internalize the social verdict of themselves" (1959, p. 71). In a similar fashion, Lowther (1963) has suggested that school experiences by providing clear criteria of success or failure - probably the single institution to do so clearly - play a disproportionate role in the development of self-esteem in most children. Lowther reported under-achieving junior high school students showed lower ratings on the Coopersmith Self-Esteem Inventory than did achieving students, and he implied that the under-achievement was the cause of the lower self-esteem (though obviously the converse proposition could be argued convincingly).

Further evidence for the relationship of self-concept and value systems to academic achievement is provided by Fink (1962a, b) and by Kelly and Veldman (1964). Fink (1962a) presents evidence that an inadequate self-concept relates to academic under-achievement, though the relation was clearer for boys than for girls. In a subsequent report of the same study, Fink (1962b) reported that under-achieving boys were found to be the most inadequate and immature of the four groups. In summarizing the important differences between the under-achieving and achieving boys, he reports that most important difference was not the response of the achieving boys to school, per se, but the achievers' conformity to the norms of the dominant culture.

Kelly and Veldman (1964), however, failed to find support for attributing delinquency and school drop-out behavior to a non-dominant value system. Self-reported values did not differentiate delinquent and drop-out groups from a non-deviant group, though Kelly and Veldman report that delinquents and drop-outs were usually similar in performance on the other measures used in their investigation. (For example, their results do support their hypothesis that delinquents and school drop-outs are more impulsive than non-deviants.)

In explaining the lack of support for the hypothesis that deviation is related to a variant control system, Kelly and Veldman suggest the possibility that deviants may maintain the dominant values, but lack sufficient impulse control to obtain their goals in a socially desirable way. An aspect of this explanation is the relation of thought to action, a topic explored below. (The question of dominant cultural values will also be explored later when the concept of a separate youth culture is discussed.)

Adaptive Ego-Functioning and Under-Achievement

A number of studies have indicated differences in personality traits and in interests, attitudes and values between the under-achiever and the student who works at or above his assessed capacity. The results of a study by Gawronski and Mathis (1965) are highly representative of traits commonly found to describe the under-achiever. Gawronski and Mathis classified high school students as over-achieving, normal-achieving, or under-achieving students on the basis of the relation of their IQ to their grade point average.

No differences were found on the Brown-Holtzman Survey of Study Habits between under-achievers and normal-achievers, but the over-achievers were found to have better study habits, be more grade conscious, be more interested and persistent, and more planful and systematic in their study habits. On the California Personality Inventory, over-achievers scored higher on responsibility, while certain divergent traits were found to best describe the under-achiever. Under-achievers scored lower on self-control, socialization, making good impressions, conformity, flexibility, and responsibility.

Hummel and Sprinthall (1965) and Whitely and Hummel (1965) cite many of the same personality characteristics that Gawronski and Mathis use to describe the under-achiever. Hummel and his associates suggest that under-achievement is a problem in adaptive ego-functioning. Their discussion of what constitutes a mature, adaptive-ego answers many of the questions Inkeles (1966) poses regarding the socialization of competence, as well as the question of what strategies of thinking we may consider to be maximally adaptive academically. Whitely and Hummel (1965) cite the following concepts of Hartmann (1958) to support the construct of an adaptive-maladaptive dimension of ego-functioning: (1) Processes of adaptation are purposive for only a certain range of environmental situations, (2) that there are several available means as alternatives in the culture for a person to master a particular encounter with his environment, and (3) that a person is most likely to act adaptively when he anticipates the future consequences of his actions.

Whitely and Hummel scored the TAT protocols of 20 superior students and 20 under-achieving students for evidence of adaptive and maladaptive ego-functioning. The students of both groups aspired to go to college. Whitely and Hummel report the following differences between the TAT responses of the two groups: The TAT heroes of superior achievers were judged better able than TAT heroes of under-achievers to distinguish and choose between appropriate alternatives to action, to perceive the subtleties of situations, and to govern their impulses accordingly. Also, the TAT heroes of superior achievers frequently accepted more responsibility for their actions and handled conflict in such a way as to satisfy their long-range interests. No differences were found in the frequency of motives and conflicts expressed, but differences were found between the two groups in the methods and strategies used to cope with needs and presses, and superior achievers more often constructed a means-end relation between need achievement and success in the TAT stories they told.

Hummel and Sprinthall (1965) state that among the indications of mature, adaptive ego-functioning are: ". . . a rational orientation to problem situations; a readiness to deal with a set of prescribed tasks with minimal delay, distraction, or supervision; a planful orientation toward the future; and a willingness to postpone enjoyable activities in pursuit of a distant goal" (p. 388). They also state that interests, attitudes, and values should be considered as interchangable.

Hummel and Sprinthall report that it is such qualities as self-control, personal responsibility, and a thoughtful, planful orientation to the tasks of living that most strikingly distinguish superior-achievers from under-achievers in their study. They propose that data from their study support the postulate that academic performance is one kind of problem-solving behavior, and that efficiency is, in each individual, a function of the structure and the strength of his ego. They assert that under-achievement can usually be considered to be a valid indicator of an immature ego, if for no other reason than due to the influence academic achievement has on the individual's freedom to exercise control over his life circumstances.

Personal Constructs

One might add to the theoretical constructs of cognitive style and adaptive ego-functions previously discussed, a third conception of personality functioning which is dependent on the cognitive controls individuals bring to their encounters with the environment. This is Kelly's theory of personal constructs which is succinctly stated in Kelly's fundamental postulate: "A person's processes are psychologically channelized by the ways in which he anticipates events" (Kelly, 1963; p. 46). Kelly stresses the view that behavior is largely determined by the way in which individuals construe the environment and perceive alternative courses of action.

Kelly has pointed out that an individual's personal construct system provides him with freedom of decision by giving meaning to events rather than forcing him to feel helplessly pushed around by circumstances. But personal constructs also delimit action, since an individual cannot make choices outside of the body of alternatives he has constructed for himself. Kelly also argues that our classifications and theoretical constructs may or may not be relevant to our subject's behavior. He states, "Over and over again, it appeared that our clients were making their choices, not in terms of the alternatives we saw open to them, but in terms of the alternatives they saw open to them" (1958, p. 53).

Peterson (1963) has presented a view which is highly consonant with Kelly's theory of personal constructs. Peterson has reviewed the literature on under-achievement and shown the highly contradictory results which have been obtained. He concludes that we should study not under-achievement but the individual - what purpose scholastic success holds for him, how he measures success and how it is used in his self-structure. Peterson states: "In the interactions between a unique personality and his perceptual world lie the reasons for scholastic failure. Much of the current research has lost sight of this and perhaps that is why it is of such little value" (1963, p. 381). The research to be described below has been concerned with the attempt to gain partial insight into the construction system of the potential drop-out - how he anticipates events and views alternative constructions.

Programs to Deal with Academic Under-Achievers and Potential Drop-Outs

The preceding discussion in this chapter has attempted to describe some of the personality characteristics which distinguish the under-achieving student and the potential drop-out from their persistent and scholastically interested classmates; to show that the origins of these characteristics can at least be partially accounted for in socialization by the family and by the school; and finally to indicate how self-concepts, attitudes, values, and "adaptive ego-functioning" are associated with school performance. The remaining sections of this chapter deal with the rationale for the research described in this thesis. The construct of "social responsibility" is introduced and the relationship of interest in youth culture participation to interest and performance in school is briefly discussed. Finally, a discussion of the areas of social responsibility to be examined and of the experimental expectations concludes the chapter.

Rationale for the Current Research

The thesis presented here proposes that assessment of cognitive style variables should assume an important role in any program attempting to deal with the under-achieving student and the potential drop-out. Certain self-consistent styles of thinking - whether classed under the rubric of cognitive style, adaptive ego-functions, or a theory of personal constructs - should contribute to competent scholastic performance, while other styles of thinking will be less adaptive to the school situation.

To avoid a Pickwickian use of terms, however, it should be pointed out that cognitive style is used here in its broadest sense as meaning styles of thinking which will manifest themselves in characteristic attitudes and modes of responding. Implicit in the term "cognitive style" as used is the assumption that individuals show consistent preferences for organizing and categorizing experience provided by the external environment. Cognitive style should thus be reflected in one's social outlook, views toward oneself, and the extent to which the individual is able to perceive and discriminate among alternative courses of action.

The research reported here has focused on a specific personality dimension called social responsibility, a fairly inclusive concept which refers to the capacity to perceive particular cues which will lead to accountability for one's behavior, and which implies the ability to anticipate the consequences of one's actions. As shown above, a recurring finding in studies of the drop-out and the underachiever is that lack of responsibility and self-control appear as personality traits which distinguish these students from students who demonstrate more persistence by working closer to assessed capacity and graduating from school. The previously cited studies of Lichter, et al.(1962), Fink (1962a, b), Gawronski and Mathis (1965), Hummel and Sprinthall (1965), and Whitely and Hummel (1965) have all affirmed the relation between responsibility and school achievement. The concept of social responsibility is central in the questions Inkeles (1966) raises concerning the socialization of competence. It is many of these same questions which have been incorporated into the concept of social responsibility as it is used in the research described here.

Areas of Social Responsibility Examined

Social responsibility, as it has been defined, is fairly inclusive. Therefore, it has been divided into four relatively independent categories: capacity for apportioning resources, maintenance obligations, respect for others' rights, and congruity with social expectations. The rationale for the inclusion of these areas as separate aspects of social responsibility and for the hypothesis that competent and noncompetent students should differ in their attitudes toward these areas has been derived from the previously cited research. Definitions of each area and reasons for considering them as aspects of social responsibility follow. (The situations referred to are described in the following chapter.)

Capacity for apportioning resources involves using money and time effectively by making practical selections among alternatives in order to advance toward goals. In the present research, this area is represented exclusively by situations calling for apportioning time. Justification for considering the ability to apportion time as an index of socialization is provided by a number of researchers. Inkeles states: "...we must recognize the ability to tell time and to order one's affairs in relation to the clock as a critical skill for participation in the modern world" (1966, p. 270). Murray (1959) has stated that "a good part of socialization consists of acquiring the capacity to keep promises, and hence, to do something which, at the appointed time, you are not inclined to do" (p. 36). Murray proposes that we need a concept of prospective time reaching into the imagined future.

Some of this time should be considered filled, i.e., committed and planned for use. Teahan (1958) and Davids and Sidman (1962) found under-achievers in their studies were more present-time oriented and lacked future-time perspective. Davids and Sidman also confirmed a frequent finding that under-achievers were less able to delay immediate gratification in return for greater long-range rewards. Thus competent and noncompetent students may be expected to differ both in their conceptions of what constitutes responsible use of resources, including time, and in the tendency to give consideration to long range alternatives.

Maintenance obligations involve the tasks which must be performed if institutions, such as the family, school, and clique, are to function properly in society. This area is represented in this study by one situation in which helping in a family task (Fall Housecleaning) is opposed by the temptation to play football with friends. If the family is a nuclear social system as Parsons and Bales (1955) suggest, the degree to which the adolescent is willing to assume responsibility for undertaking and completing family tasks should reflect the degree of his socialization. While involving the ability to apportion time, this area reflects not so much working toward distant goals as the ability to undertake and complete the task at hand. A task orientation is a necessary prerequisite to performing effectively in society - in school or on the job.

Respect for others' rights and Congruity with social expectations: It is more difficult to define these two remaining areas and to state succinctly why competent and noncompetent students should be expected to differ in their attitudes toward them. However, both these areas involve the ability to anticipate the consequences of one's actions. Respect for others' rights involves behaving in such a way that others are allowed maximal opportunity to fulfill their own desires and needs. This requires a well-defined self-concept and an awareness of one's own social stimulus value. It also includes the ability to reason empathetically and to consider the effect one's own actions have upon others. What is meant is the ability to develop and maintain satisfying relationships with close friends, peers, and others without excessive exploitation. These are qualities which both Inkeles (1966) and Witkin, et al. (1962), ascribe to the competent, mature individual.

The area called congruity with social expectations involves maintaining a competitive position by cooperating with, or conforming to, social expectations. It includes adherence to laws, to regulations, and particularly to social conventions. Possibly, the best description of what is meant is found in the previously cited article of Inkeles (1966) in which he discusses the relationship of social "demands" to competence training. Inkeles presents a long and admittedly partial list of the attributes, including social skills and personality traits, which he feels make up the competent individual. Congruity with social expectations is represented in the present research by three situations which involve conformity to social conventions in the presence of restraints. These restraints vary from external social influence to the exercise of personal self-control.

The finding in several of the previously cited studies that dropouts and under-achievers tend to be less conforming and adhere less closely to dominant cultural values suggests that less competent students may be expected to differ from more competent students in their assessment of what constitutes socially responsible reasons for conforming to social conventions.

The research reported in this thesis has involved asking students to respond to and discriminate among cues in a number of situations involving varying degrees of responsibility. Rather than focusing on cues aimed at a vague sense of adjustment, fairly specific cues which should presumably be associated with effective classroom performance were used.

A number of social situations have been constructed consisting not only of factors concerning school directly, but also involving situations outside the school with family and friends, and occasionally involving exclusively solitary behavior. The behavioral options have been extended on a continuum from relatively effective to relatively ineffective performance. In contrasting alternatives in each situation, attempt has been made to incorporate at the same time both positive and negative aspects. An example of a negative aspect of an alternative, such as studying, is that is is hard work. One may hope that a positive aspect of the same example is that study is interesting and should provide more rewards than not studying. In each situation alternatives are opposed by a temptation or a diversion. In nearly every case, responsible choices in which self-directed actions arise from internal controls have been balanced by other-directed actions arising from external controls. In many cases the situations take place in a youth culture context and the tempting alternatives consist of youth culture lures or rewards. The concepts of a separate youth culture and its relation to school performance are discussed below.

Youth Culture: One of the most debated topics concerning adolescent behavior within the last decade has been the sociologically oriented construct of a separate youth culture.

Regardless of the position taken on the existence of a separate culture composed of youth, the concept is full of research possibilities. Parsons' (1959) contention that youth culture serves to provide the necessary support to adolescents during their quest for independence from parental control has stimulated research and related theoretical positions. This viewpoint is reinforced by Coleman (1961) who suggests that adolescents are looking to each other rather than to the adult community for their social rewards. Coleman further suggests that youth culture has values of its own. A somewhat different formulation is provided by Cervantes (1965) who views youth culture in terms of personality needs manifest at a specific point in time: these needs directly influence the intensity of participation. Cervantes provides further support for the notion that greater participation in the youth culture opposes adult patterns of socialization. He notes that school drop-outs tend to have friends who are not school-oriented, not approved by parents, and who are much older. In addition, school drop-outs tend to have deferred gratification patterns which are weak and tend to be resentful of authority. The power features of youth culture are held to be especially important by Horrocks (1965) who notes that through youth culture the adolescent is able, to a degree, to manipulate and control his environment. The preceding viewpoints reinforce the idea of youth culture rewards and suggest that adult and youth culture values are not the same.

Both psychoanalytic theory and social learning theory suggest that adolescents may participate too intensively in peer functions and thus forsake adult-approved objectives of socialization. But each of these theories proposes different reasons for the adolescent doing so. Psychoanalytic theories of socialization view youth culture participation as an exit for rebelliousness. This is accomplished by a form of independence seeking through reaction formation against childhood dependency which results in a rejection of all things adult and parental. In contrast, social learning theory suggests that youth culture participation may result from attempts to increase status with peers and thus maximize available social rewards.

A study by Grinder (1967) reported results more consonant with the latter theory. That study made the basic assumption that potential high school drop-outs find youth-culture involvement more appealing and immediately rewarding than school and family responsibilities. Grinder suggested that those responsibilities may be seen by the potential drop-out as irrelevant or even in conflict with the satisfaction of social needs through youth-culture involvement. Thus, those adolescents turn to the youth-culture for satisfaction of their social needs.

Grinder reported strong confirmation of this hypothesis which was tested by means of a specially constructed Social Interests Inventory (SII). Adolescents were found to be differentially motivated by school, their family, and by peers. Grinder reported that boys active in their high schools demonstrated strong father-orientation and weak youth-culture involvement. In constrast, boys characterized as potentially ready to drop from school demonstrated weak father-orientation and strong youth-culture involvement.

Grinder reported in this same study, however, that the SII predicted membership in a college-bound classification better than it did membership in a potential drop-out group. For a proportion of the boys classed in the college-bound group, youth-culture participation was not inimical to participation in school-sponsored activities and to high academic aspirations. As a group, however, youth-culture participation was lower in the college-bound group than among students classed as potential drop-outs.

Relationships To Be Tested

The availability of youth-culture (YC) scores and school background information from a previous testing of the same subjects as used in the present research offered an opportunity to test both the construct validity of the Social Responsibility Test (SRT) and the concurrent validity of it and youth-culture measures. In addition, the sample used by Grinder (1967) from which the youth-culture measures have been taken used only junior and senior boys. The present research offered an opportunity to test relationships of both YC and SRT variables to measures of school performance among sophomores.

Hypothesized relationships were taken from a study by Grinder (1967). He reported that all school background variables used in his study were related in a consistently intercorrelated pattern of high-age in school, high absences, low credits, low curriculum, and low scholastic aptitude test scores. Each of the variables in this pattern was significantly correlated with low school sports, low adult-sponsored activity, low hours of study, and low academic aspiration. The above pattern of school variables, with the exception of age, was also related to higher scores on every youth-culture scale. Age was related only to high independence assertion.

Experimental Hypotheses: The previously cited research and theory have led to the following hypotheses which deal with attitudes toward social responsibility as it has previously been defined and described and as it was measured in the research discussed in the following three chapters.

From the preceding discussion, it is hypothesized that low social responsibility, as measured by the specially constructed Social Responsibility Test is directly related to high youth-culture interest, and that low social responsibility is accordingly related to the pattern of variables directly related to high youth-culture interest reported above, i.e., lower interest in school and school-related activities. Thus, the expectation is that low Social Responsibility Test scores are related to low academic interest and to higher interest in youth culture participation.

II

METHODS

Overview

Stimulus material used to test the hypothesis that potential drop-outs would be less able to discriminate the cues which would more likely lead to effective behavior consisted of 50 cartoon-like illustrations. These were divided into ten sets, each with five illustrations. Each set was photographed on 35 mm. color film and reproduced with all five pictures of the set on one 35 mm. slide transparency. Each set involves a different conflict situation faced by a teenage boy with whom the subject is expected to identify. The five illustrations making up the set each depict a different course of action taken by the boy or suggested motivation for acting as he does.

Subjects were asked to assess the five alternatives, designed to vary in degree of social responsibility, in two ways: first by rating each alternative on a five-point Likert scale, and then by placing the five alternatives in rank order from most to least responsible.

A large portion of the work reported here has consisted of the development of these illustrations and their underlying rationales. Accordingly, prior to the discussion of the final design and the procedures used for the data collection, this chapter will focus on the development of the stimulus materials and the procedures used to pretest them.

Procedural Sequence in the Development of the Stimulus Materials

The development of the stimulus materials consisted of three phases. Phase One focused on the development of a rationale for each of the social responsibility conflicts. Phase Two involved transforming the written rationales into illustrations and colored slides. Phase Three consisted of field testing and refining the materials.

Phase One

The protocols (found in Appendix A) provided the conceptual framework for the development of the stimulus materials. These protocols have centered on the concept of social responsibility, as previously defined, which is regarded as a prerequisite to effective behavior. The rationales for the protocols were originally drawn from a previously developed instrument designed to measure youth-culture interests (Grinder, 1966; 1967). Selected items were modified to fit the rationale below.

Six components of each protocol are subsumed under the rubric of social responsibility. These six components--area, dimension, conflict, context, basic setting, and characterization--constitute a hierarchical organization from the most general to the most specific description of each stimulus set.

Area is the most general component of each protocol. Since social responsibility is a general and therefore highly inclusive construct, it was subdivided into four relatively independent areas:

Maintenance Obligations, performing tasks which must be fulfilled if institutions, such as the family, school, clique, etc., are to function properly in society;

Respect for Others' Rights, exercising options which maximize the opportunities for other persons to fulfill their own desires and needs;

Congruity With Social Expectations, exerting maximal effort to maintain a competitive position by first cooperating with, or conforming to, social expectations; and

Capacity for Apportioning Resources, using money, time, abilities, etc. effectively, i.e., making practical selections among alternatives for advancing toward goals.

Dimension is the second protocol component and refers to the contextual aspect of the area which is mutually exclusive. The dimension presents the concise milieu and the general conflict. Each area has the potential for several different dimensions, e.g., peer group, crowd, solitary, family, etc.

Conflict forms the third component of the protocol. This component is concerned with the aspect of each situation where resources or social consequences are or may be dynamically opposed, in that choices to attain certain resources lead to forsaking all others. This is essentially the double approach-avoidance conflict described by Miller (1944). Each cartoon in a given set presents the same protagonist: an adolescent boy confronted with a conflict involving a choice between a tempting incentive and responsible action. In each situation the tempting incentive has been held constant while cues suggesting reasons for the boy's actions are varied. Since social responsibility as defined is a relative concept, nearly all of the alternatives may be considered "responsible." However, attempt has been made to provide alternatives which constitute a more responsible course of action in a given situation when considered relative to the other alternatives provided. This was done by varying cues in discriminable degrees of responsibility among the five alternatives.

Context: This portion of the protocol acts as a concise recapitulation from area to conflict of the action taking place and as a transition to the two remaining protocol components.

Basic Setting and the Characterization: These two latter components were intended to provide an artist with a scenario from which to work. They describe the situational surroundings in which the conflict is enacted by the central protagonist, with whom the subject is intended to identify.

At the completion of Phase One, the ten protocols contained an area, dimension, and specific conflict situation to be explored. The five alternatives represented in the protocols were subsequently developed in Phases Two and Three in consultation with several groups of high school boys. The protocols were subsequently modified to include the alternatives and cues these boys suggested.

Phase Two

This relates to the actual preparation of the visual materials. An artist transformed a portion of the verbal description of each protocol--the setting and the characterization--into a cartoon illustration. One illustration was drawn for each of the ten protocols depicting the basic conflict involved in each. Conferences were held on the completed sketch prior to and after coloring to verify that the sketch matched the corresponding protocol as closely as artistically possible. The illustrations were photographed on 35mm. color film and the transparencies mounted in 2" x 2" slides. Phase Two was completed with the development of the ten slides depicting the conflict portion of each of the ten protocols.

Separation of the ten protocols by area resulted in the following subdivisions:

Capacity for Apportioning Resources--4 protocols relating to time;

Congruity with Social Expectations--3 protocols;

Respect for Others' Rights--2 protocols; and

Maintenance Obligations--1 protocol relating to the family.

Each protocol was labeled with a short descriptive label to simplify identification.

Phase Three

Phase three consisted of field testing the prepared colored slides. The test subjects were ten boys, sophomores and juniors, in a large urban high school, who were selected as potential drop-outs on the basis of teacher evaluations and academic achievement. The potential drop-out subjects served two important functions: (1) to determine if they could perceive the cues and the basic conflict in each of the ten situations, and (2) as a source of core ideas for alternatives to the various conflicts.

Uniform procedures were employed during the test sessions. The experimenter introduced himself and established rapport with the subjects. The participants were informed that any responses which they made during the session would be held in confidence. Although a tape recorder was used to transcribe responses, the subjects were assured that the recorder served only for review purposes and to save extensive note taking. The instructions given for the task consisted of telling the subjects that they would view a series of cartoons in which a boy finds himself confronted with a conflict involving some phase of social responsibility. They were asked to suggest possible alternative actions available to the boy in each conflict. Single conflict illustrations (each depicting one of the protocols) were projected onto a screen and cue questions were posed to elicit alternatives which the boy in the conflict might pursue. The questions were so phrased that their answers required alternatives applicable to both the approach and the avoidance gradients of the conflict paradigm, e.g., under what conditions might this boy leave (or stay at) a party when there is an important test the next day? Two to three slides were presented during the 55 minute discussion sessions.

Upon completion of each test session all relevant, non-synonomous responses were listed using the subjects' vernacular. The elicited responses provided some of the core ideas for the selection of the five alternatives to each conflict which comprised the next step. One of the problems encountered in the construction of the alternatives revolved around the selection of alternatives which were dimensional and capable of ordering in a hierarchy from high to low social responsibility. The final step consisted of randomizing and reproducing a verbal statement of the alternatives on answer sheets These were then used to refine and elaborate upon specific cues in each of the alternatives.

Precise development of the visual materials required retesting the same subjects with the randomized list of alternatives (five in all) for each of the conflict slides. The subjects viewed the conflict slide and were asked to rank order the five alternatives in each conflict situation in a hierarchy, assigning the numeral 1 to the most socially responsible alternative and the numeral 5 to the most socially irresponsible alternative. The numerals 2 and 4 were respectively assigned to the next most responsible and irresponsible alternatives, leaving the numeral 3 to represent that alternative which the subject deemed to fall midway between the two extremes.

The foregoing procedures were repeated for the development of all stimulus materials until a series of five scalable alternatives were developed.

Transformation of the five alternative statements into descriptive scenes completed the developmental sequence. Each scene pictorially depicts one of the five alternatives to the conflict and, in essence, describes the interplay of the character and the situation. Some individual scenes necessitated a change in basic scene to fit the particular alternative. The five descriptive scenes and the scalable alternatives, which were incorporated into the conflict, provided a supplement to the existing protocol. The final version of each protocol is found in Appendix A.

The protocols with the descriptive scenes for each of the five alternatives were resubmitted to an artist who drew colored cartoon illustrations of each of the five alternatives for each of the protocols. The basic conflict was incorporated into each of the five alternatives where artistically possible but in all cases, at least two of the five illustrations contained the conflict. (This was found to be sufficient since all five alternatives are presented simultaneously in one slide and the respondent was asked to view all five before executing the ordering process. Pilot testing indicated that in most cases the subjects clearly perceived the conflict.) The completed illustrations were submitted to an evaluation process before coloring. Upon completion of the coloring, the five illustrations, representing the five selected alternatives in each conflict, were randomly lettered A, B, C, D, and E. The five illustrations were then photographed together as one set. Illustrations always appeared in the same order with A and B at the top, and C, D, and E at the bottom. The completed set of pictures was dubbed the Social Responsibility Test (SRT).

The ten prepared colored slides were retested on a group of potential school drop-outs and college-bound students selected on the basis of teacher evaluations. The test sample, consisting of sophomores and seniors in a large urban high school, were asked to rank order the alternatives presented in the slides in terms of a hierarchy from most to least socially responsible by assigning numeral ranks to each of the alternatives in the same fashion as reported for the previous testing procedures.

The clarity of the cues in each slide and the extent to which they were readily perceptible were evaluated by asking each subject to interpret the illustrations. The patterns of orderings for the two groups (potential drop-outs and college bound students) were thoroughly analyzed. Slides which appeared to be ambiguous, slides for which there appeared to be limited concensus, and slides which appeared to be too easy, i.e., high concensus with nearly all subjects of both groups agreeing, were redesigned, returned to the artist for modification, and rephotographed. Upon completion of this process, the colored slides were ready for the final pretest and data collection. Black and white reproductions of the final version of each of the ten picture sets may be found in Appendix B.

In summary, the development of the visual materials consisted of the following steps: (1) isolation of a situation in an area of social responsibility; (2) developing a rationale and the corresponding written protocol for each conflict situation (the most critical step in the development since it formed the conceptual basis on which the study proceeded); (3) preparation of the basic conflict slide; (4) controlled testing of the conflict slide and selection of five scalable alternatives which vary in degree of social responsibility; (5) preparation of the final slide set for each protocol, incorporating the basic conflict into the five alternatives; and (6) controlled retesting of the final version of the stimulus materials with a sample of potential drop-outs and college-bound male high school students.

Pretest Procedure

The final version of the visual materials (ten 35 mm. color slides) were pretested on a sample of 35 sophomore and senior boys from a large urban high school who had scored at the high (19 students) and low (16 students) extremes of the independence assertion subscale of the youth culture portion of a Social Interests Inventory (Grinder, 1967). (The central hypothesis of this scale is that potential drop-outs will tend to score high and college-bound students will tend to score low.) Reading scores and records of absenteeism provided corollary measures in verifying the dichotomy. The pretest subjects were told that the purpose of the research was to determine how high school boys perceive social responsibility and that their task was to react to ten situations in which a teenage boy is faced with a conflict. They were asked to rank order the five alternatives available to the boy in each situation in a hierarchy from most, to least, responsible. The assigned numerical values used in the subjects' rankings were the same as in previous testing. Before beginning, the subjects were asked to define social responsibility. This request served two purposes: First, it led each subject to consolidate his thinking on social responsibility which should be reflected in his rankings of the alternatives; and second, it permitted a more precise evaluation of the subject's rationale for ordering the alternatives.

The results of this pretest were somewhat equivocal. Yet, differences in the responses of the two groups to the alternatives of the slide sets suggested the method might in fact prove useful in discriminating the response styles of competent and noncompetent students. However, many of the boys used in this phase of pretesting had also been involved in the development of the instrument alternatives. Thus, one additional pretest of the instrument and testing procedures was employed with 46 senior boys of a rural consolidated school. The results of this pretesting are discussed after an explanation of the scoring of the social responsibility alternatives.

Scoring Procedure

A problem encountered at this point in the research was the need for some system for scoring the "correctness" of each subject's rating of the various alternatives presented in each slide set. One of the difficulties in attitudinal research of the sort reported here is developing non-arbitrary rankings with which to score subjects' responses.

One phase of the problem required the identification of some procedure for testing and verifying the correctness of the *a priori* rankings of the alternatives in each protocol. Since the visual materials were concerned directly or indirectly with effective school performance, a group of college students who should presumably be the more successful students acted in the capacity of a criterion group for verification of the a priori rankings. In addition they provided some justification for the formation of a weighting system for scoring subject's responses.[1]

A heterogeneous mixture of students, ranging in classification from college sophomores to graduate students (16 males and 20 females), who were enrolled in an undergraduate course in Adolescent Psychology, formed the criterion group. Before commencing with the actual task, the criterion group received a few brief instructions. They were informed that they were serving as a standardization group for a research study relating to social responsibility. They were also informed that their task involved rank ordering alternatives presented in slides depicting a teenage boy faced with a conflict where five alternatives of varying degrees of social responsibility were available. The criterion group was asked to rank order the alternatives by designating the numeral 1 as the most responsible alternative and the numeral 5 as the most irresponsible alternative.

A coefficient of concordance (the Kendall W) was computed for the rankings of the five alternatives in each slide set by the college students serving as judges in the criterion group. The Kendall coefficient of concordance, W, measures the extent of association among several k sets of rankings of N entities, and is typically used to determine the agreement of several judges or the association among three or more variables. Two associated indices of agreement are s and average r_s . The s is the variance of the rank sums. The larger this variance, s, the greater the degree of association among the k sets of ranks.

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[1] The protocols reflect the initial consideration given in their construction as to which alternatives were most responsible. The college criterion group changed the ranking of some alternatives; thus, the final rating-ranking system consists of a reconciliation of the two ordering procedures.

The Kendall W is a ratio of s, the variance of the rank sums, to the maximum possible variance of the rank sums, were all k judges to agree. Thus, the higher the value of W, the higher the degree of association among the k judges. The average r_s is equivalent to the average value of the rank order correlations over all pairs $\binom{k}{2}$ of rank orders.

$$\text{Average } r_s = \frac{kW-1}{k-1}. \quad \text{(Siegel, 1956.)}$$

The indices of agreement for the college criterion group are reported in Table 1. A test of the hypothesis that there is no agreement among the judges is provided by a comparison of the obtained value of s with the critical values of s in the Kendall coefficient of concordance. Extrapolation of tabled values of s (Siegel, 1956, Table R, p. 256) indicate that an obtained value of s for ratings of five objects by 40 judges exceeding 982.85 and 1346.52 allows the hypothesis of no agreement to be rejected at the .05 and .01 levels of probability, respectively. The number of college students serving as judges varied from 32 to 36 (as a result of some of the students having to leave early during an evening testing session). Obtained values of s found in Table 1 are significant at the .01 level for all but slide Set 7 which is significant at the .05 level. Consensus on the rankings of the alternatives in slide Sets 2 and 5, though significant, was

Table 1

Measures of Agreement of the College Criterion Group on Each of the Ten Composite Stimulus Illustrations*

Rationale No. and Label	s	Average r_s	W
1. Birthday Party	7,912	.72	.73
2. Bikini Scene	3,312	.28	.30
3. Conversation About Girl or Study	5,720	.54	.56
4. "Girlie Magazine" in Street	6,182	.46	.48
5. Pajama Party	2,308	.19	.21
6. Boy Aiding with Fall Housecleaning	8,930	.68	.69
7. "Girlie Magazine" on Drugstore Magazine Rack	1,060	.07	.10
8. Car polishing or Study	7,870	.60	.61
9. Boy Dating Plain Girl	9,568	.73	.74
10. Boy Daydreaming About TV and Reasons for Studying	5,650	.47	.49

*The s associated with each W is significant at the .01 level for all slide sets but Set 7 which is significant at the .05 level. See the discussion in the text above.

also quite low. The cues in Sets 2, 5, and 7 were subsequently modified to make them more obvious.

The significant coefficients of concordance may be taken as an indication that the criterion group was applying essentially the same standards in their rankings of the alternatives. This fact lends support to the notion that some degree of agreement existed as to what constitutes socially responsible action even though the experimenters had not defined for the *S*s what criteria they themselves felt were involved. (However, subjects were asked to define social responsibility prior to making their rankings.)

As Siegel has pointed out, however, a high or significant value of *W* does not mean that the orderings are *correct*. In fact, they may be incorrect in regard to an external criterion (Siegel, 1956, p. 238). *A priori* ordering of the "correct" rankings had been made by the experimenters in constructing the protocols. In most cases the rankings of the college criterion group fairly well matched the *a priori* rankings--especially at the extremes--as to what constituted the most and least responsible action. Where agreement was not obtained, it was necessary to impose an ordering somewhat arbitrarily from *a priori* theoretical considerations. Table 1 of Appendix C contains the rankings decided upon for each slide set. These rankings are based on a reconciliation of the *a priori* and criterion group rankings, and constitute the "standard" by which attitudes toward social responsibility have been judged.

The second problem necessitated a decision relating to the acceptable tolerance for deviation between these standard rankings and those of the subjects. A system was required for assigning penalties to deviations. A scoring system was devised in which subjects who deviated from the standard were assigned a lower score depending upon how discrepant their responses were from the standard rankings.[2]

Construction of a scoring scheme involving weights permitted the generation of a total score for each slide in the ranking process. Maximum agreement with the standard yields a score of 25, and mimimum agreement 13. Weights range from 5 to 1, with 5 representing a rank in agreement with the standard. Correspondingly, a value of 4 is assigned if the subject ranks the alternative one rank to either side immediate to the correct ranking, 3 if the subject's rank is two ranks from the standard rank, etc. Thus, a high score indicates greater agreement with the standard rankings used as weights and high responsibility as defined by the instrument. A low score indicates the converse. The weighting system is contained in Table 1 of Appendix C.

Pretest of Procedures

As previously mentioned, a final pretest was conducted with 46 senior boys of a rural consolidated school. This allowed a test of the coherence of the ten slide sets, the clarity of instructions and procedures for data collection, and the feasibility of the scoring system just described. This sample was made up of senior boys who had at least one study hall on the day of the testing. Testing procedures are discussed below and in Appendix D which contains the instructions to subjects.

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[2] The author expresses his appreciation to Dr. Anne Cleary, a faculty member of the department of Educational Psychology, for her assistance in helping to devise the scoring system.

Test Materials and Procedures

Subjects were confronted with two basic tasks: (1) rating each of the five alternatives of each slide set on a rating scale, and (2) placing the five alternatives in rank order from least to most responsible. The rating task was included as a test of how scaleable the alternatives were in fact. (It proved to be less desirable than a "forced choice" task provided by the rank ordering. However, discussion of the differences in the two methods will be deferred to Chapter Four in which the results are discussed.)

In the rating task subjects were asked to rate each of the five alternatives on a Social Responsibility Scale (Figure D-1, Appendix D). This scale consisted of five equidistant divisions ranging from 5 to 1, with 5 representing very responsible, 4 slightly responsible, 2 slightly irresponsible, and 1 very irresponsible. The numeral 3 was labeled responsible to designate an action deemed neither responsible nor irresponsible, but that which would fall midway between the two extremes. It should be noted that the values assigned to the scale positions are the opposite of those which were employed in pre-testing. The effect of this change is that a high score reflects high responsibility and a low score reflects low responsibility--as responsibility is defined by the instrument.

The order for the presentation of the ten slides for the rating task was selected from a table of random numbers. For simplicity in referencing the identity of each slide and the corresponding protocol from which it was developed, each slide and protocol has been given a numerical label (indicated in parenthesis) which corresponds to the protocol number (_cf_. Appendices A and B). A summary of the organization of the ten slide sets is found in Table 2 which contains the protocol number, the protocol label, and a short descriptive label to be used to reference the related slide set in subsequent discussion.

For the rating task, the ten stimulus slides were presented in the same order in which the corresponding protocols are numbered in Appendix A. Each stimulus slide remained on the screen for 2 minutes at which time the subjects were notified and the next stimulus slide was presented. Each subject completed one practice example before the actual test began.

The second task required the subjects to rank order the five alternatives in each of the ten composite stimulus slides using the same numerical range employed in the rating task. That is, the numeral 5 represented the alternative deemed most responsible; the numeral 1, the alternative viewed least responsible; and 2, 3, and 4 were assigned to the alternatives ranked in between. As previously mentioned, the result of the ranking system (as of the rating system) is that a high score corresponds to high responsibility as defined by the instrument. The slides were re-randomized for the rank-ordering task. The order in which the ten slide sets were presented in the rank-ordering task is indicated in parentheses in Table 2. Each stimulus slide remained on the screen for 90 seconds at which point the subjects were notified and the next set presented. Complete instructions to subjects may be found in Appendix D.

Pretest Results

Total scores for both the rating and the ranking methods were computed for each subject using the scoring system described previously. These scores were computed by means of the Generalized Item and Test Analysis Program, GITAP (Baker, 1966) on the CDC 1604 digital computer of the University of Wisconsin Computing Center (UWCC). As shown in Figure 1, both rating and ranking methods yielded a distribution of total scores that is somewhat negatively skewed. While the rating method is less skewed than the ranking method, the latter method resulted in a wider range of scores. Thus both methods were retained for the final data collection.

Final Design and Procedures for Data Collection

Subjects:

The ten colored slides were presented to 177 high school boys--102 sophomores and 95 seniors--in a large urban high school. Subjects had previously been administered a Social Interests Inventory, a test

Table 2

Subscales of Slide Sets and the Order in Which Slides Were Shown in the Rating and Ranking Methods

Set No.*		Protocol Label	Brief Label
Subscale #1 Capacity for Apportioning Resources -- Time			
1	(2)	Surprise Birthday Party	Party/Exam
3	(1)	Study or Discussion about a Girl	Soda Shop
8	(6)	Conflict between Car Polishing and studying	Car/Study
10	(10)	Boy Daydreaming While Studying	TV/Study
Subscale #2 Respect for Others' Rights			
2	(7)	Bikini Scene	Bikinis
9	(9)	Boy Dating a Plain Girl	Plain Girl
Subscale #3 Congruity with Social Expectations			
4	(4)	Boy Seeing a "Girlie Magazine" in the street	Girlie Mag
5	(5)	Girls' Pajama Party	PJ Party
7	(3)	Reading a "Girlie Magazine" at a Drugstore Magazine Rack	Mag Rack
Subscale #4 Maintenance Obligations -- Family			
6	(8)	Boy Helping Parents with Fall Housecleaning While Friends Urge Him to Play Football	Chores/Ball

* The set number corresponds to the order in which the slide set was shown in the rating method. The number in parenthesis refers to the order in which the set was shown in the ranking method.

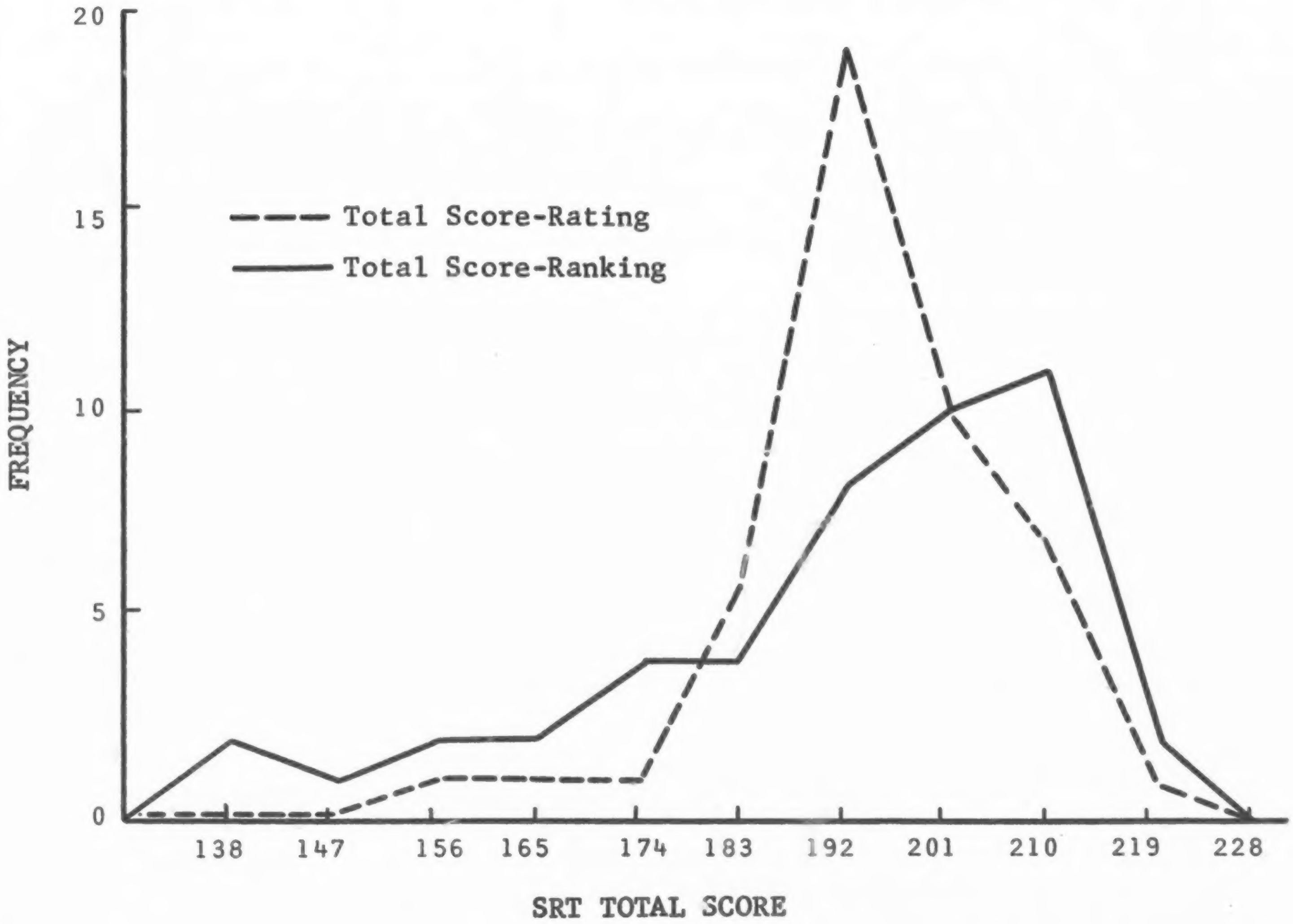


Figure 1. Distributions of SRT rating and ranking total scores for a pretest sample of senior boys (N=46)

instrument to measure youth-culture interests (Grinder, 1967) during the Fall and Winter, 1966.

The use of the same subjects used in this prior research afforded a measure of the concurrent validity of the two instruments since they are presumably related. It also allowed some of the same data, which had been collected for each subject in order to establish the validity of the youth-culture instrument, to be used as a test of the validity of the method reported here. Of particular advantage was the availability of school records for each subject. Subjects who omitted responses and subjects for whom scores on youth-culture or school data were missing were omitted from the sample. Scores for subjects who appeared not to have taken the scoring task seriously--namely, those for whom response sets could be identified, such as responding with all one number or a definite order over and over--were also omitted. This left a total of 73 seniors and 95 sophomores.

Methods:

Methods for collecting and analyzing test scores were the same as those previously employed with the pretest group. Directions to subjects are found in Appendix D. Subjects were released from their social science classes to participate in the study. The groups varied in number from 2 to 35 subjects. Larger groups proved to be impractical due to the difficulty of seeing the pictures clearly at greater distances from the screen. In subsequent development of similar materials for classroom use, consideration should be given to the use of individual booklets.

Experimental Variables:

Three groups of variables were employed in the research to test hypothesized relationships: Social Responsibility Test (SRT) variables, Youth-Culture (YC) variables, and school background data. The latter two groups of variables were available from a previous study employing the same subjects.

Social Responsibility Test: These variables consisted of a total score and four subscale scores for both the rating and ranking methods and individual set scores for the ranking method only. Individual set scores were computed by the scoring system previously described. Scores for each subject consisted of a score generated for each slide based on the rating or ranking numeral assigned by the subject and the corresponding weight given to that assignment. The weights used for each slide set are found in Appendix C. Four subscale scores corresponding to the four areas represented in the protocols were computed from the sums of the scores of the slide sets making up the subscale. Total scores, of course, were based on the sums of all ten slide sets. The organization of the slide sets which comprise the various sub scales is shown in Table 2. The above computations were performed by the GITAP Program (Baker, 1966) on the CDC 1604 digital computer of the University of Wisconsin Computing Center.

Youth-Culture: Seven scores were available for each subject and an eighth was computed. The seven available scores were subscale scores from the youth-culture portion of the Social Interests Inventory (Grinder, 1967). These were three motivational variable scores for expressed interest in youth-culture participation--status seeking (SS), independence assertion (IA), and sex (Sx)--and four variables relating to the context in which youth-culture rewards are sought: dating (D), few friends (FF), clique-crowd (CC), and solitary (S). These seven variables form a matrix of motivation and context. Adding the first three or the last four yields a total score for expressed interest in youth-culture participation. This total score was not employed by Grinder (1967) in his study but it has been employed as an additional youth-culture variable in the present study.

School Background Data: These represent the third body of data employed. These data were available from a concurrent study of youth-culture interests (Grinder, 1967). Five school variables were employed in the present study: Age (in months), absences (in half-days), the total test score for scholastic aptitude, the number of school credits, and the high school program (college preparatory or general).

Statistical Analyses:

The above data were analyzed separately for sophomores and seniors. The three groups of variables were placed in a correlational matrix and analyzed by means of a Pearson Product-Moment correlational technique. These correlations were computed by a University of Wisconsin Co-op Monitor Library Tape Program (DSTAT-1). The youth-culture and school background data were employed as criterion variables in order to obtain a measure of construct validation.

Subsequent to these analyses, post-hoc analyses were performed in an attempt to find best combinations of predictors among the variables available. These analyses employed the multiple correlation option available through the UWCC Regression Analysis (REGAN-1) library program. Results of these analyses are reported in Chapter III.

III

RESULTS

The data representing research results are presented in this chapter in three parts. Part I presents descriptive statistics, frequency distributions, and the intercorrelations of Social Responsibility Test variables. It allows some assessment of the independence and inter-relatedness of SRT items and subscales. Part II presents descriptive statistics and intercorrelations of youth-culture (YC) and school background variables and the relationship of SRT variables to them. This allows both the assessment of construct validation of the Social Responsibility Test and a test of the hypothesized relations between SRT and YC variables to academic interest and competence. Part III presents the results of *post hoc* analyses which were performed in an attempt to find the best SRT items to score as predictors in future research which might be undertaken with similar methods.

Part I

Analyses reported in this part are based on 95 sophomore and 73 senior boys of a large urban high school.

Reliability of the Social Responsibility Test:

Two measures of the reliability of the instrument are available. These are: First, the internal consistency of the individual items making up the total test and subscales; and secondly, the intercorrelations of the subscales and of the individual slide sets which comprise the subscales. Table 3 gives the internal consistency reliability computed by the GITAP program which uses Hoyt's analysis of variance method. The Hoyt reliabilities generated from item analysis for the four subscales and for the total test show that the rating method produces fairly poor internal consistency. In contrast, the ranking method produces relatively good internal consistency.

The Hoyt r for total test (ranking) indicates that 65% of the total test score variance is accounted for by the responses to the test items. Subscale reliabilities for the ranking method show that the proportion of the variance which can be accounted for in the responses to the test items ranges from nearly 50% for Subscales 1, 2, and 4 to 34% for Subscale 3. The reliability scores shown in Table 3 are for the total sample. Separate item analyses were not performed for the sophomore and senior samples.

As seen, allowing subjects to rate the five alternatives on a rating scale proved to be a much less reliable method than requiring them to make a "forced choice" of the rank ordering of the five alternatives. This differential effectiveness of the rating and ranking methods is probably a result of several factors. The difference is not surprising since rank ordering the alternatives

Table 3

Hoyt Reliability of Total Test and Subscales

Scores for Rating and Ranking

	Subscales	Rating Hoyt *r*	*SD*	Ranking Hoyt *r*	*SD*
No. 1	Capacity for Apportioning Resources (Time)	.23	5.03	.71	8.27
No. 2	Respect for Others' Rights	.37	3.55	.71	5.22
No. 3	Congruity With Social Expectations	.32	4.82	.58	6.26
No. 4	Maintenance Obligations (Family)	.66	5.21	.68	3.25
	Total Test	.61	10.97	.83	17.60

requires much closer attention to the cues incorporated into each alternative. Also, the rating method allows a greater chance for the occurrence of response sets, i.e., rating all or a number of alternatives equally responsible or irresponsible. For both these reasons, the rating method resulted in a more limited range of scores especially among higher scores denoting higher responsibility (see Figures 2 and 3). As a result, all statistics for the instrument in subsequent discussion and tables are based on the rank-ordering method.

Intercorrelations of Social Responsibility Test Items:

A second available indication of the reliability of the instrument is provided by the intercorrelations of the components making up the instrument--the ten individual slide sets and the four subscales. Descriptive statistics, including mean, median, and standard deviation, for each of these components is shown in Table 4 for both samples. The median has been included as a measure of central tendency since, as Figures 4 and 5 show, distributions of individual set scores represent varying degrees of skewness. The lack of "top" displayed by some sets, especially Sets 1, 3, 4, 6, and 9, represents a deficiency of the test. Some solutions to this problem are presented in Chapter IV.

Intercorrelations of Picture Sets and Subscales:

Tables 5 and 6 show intercorrelations of the slide sets with each of the other slide sets. Intercorrelations of subscale picture sets are enclosed along the diagonal. The individual slide sets were each

Table 4

Descriptive Statistics for Social Responsibility Test Scores for Sophomore (N = 95) and Senior (N = 73) Boys

SRT Variables	Sophomores			Seniors		
	Median	Mean	SD	Median	Mean	SD
Total Score (Rating)	197.4	195.9	10.85	198.7	192.6	11.36
Total Score (Ranking)	199.1	197.7	17.07	204.0	201.3	14.65
Subscale 1	80.1	79.5	7.32	82.6	81.4	6.50
Subscale 2	40.7	40.0	5.30	41.2	41.0	4.77
Subscale 3	57.5	57.2	6.65	57.2	57.0	6.53
Picture Set						
1 Party/ Exam	21.7	20.9	2.98	22.2	21.5	2.48
2 Bikinis	19.9	19.0	3.40	20.4	19.6	2.88
3 Soda Shop	20.9	20.0	3.34	21.7	20.8	3.07
4 Girlie Mag	21.7	20.6	3.24	21.7	20.9	3.15
5 PJ Party	17.3	17.9	3.35	18.3	18.0	3.00
6 Chores/ Ball	22.7	21.3	3.34	22.6	21.8	2.91
7 Mag Rack	18.4	18.3	3.03	18.9	18.2	3.05
8 Car/ Study	20.4	19.3	3.15	20.3	19.6	2.79
9 Plain Girl	21.8	21.0	3.02	22.1	21.3	2.95
10 TV/ Study	19.6	19.3	2.43	20.0	19.5	2.29

Note: Subscale 4 consists of only one set, Set 6.

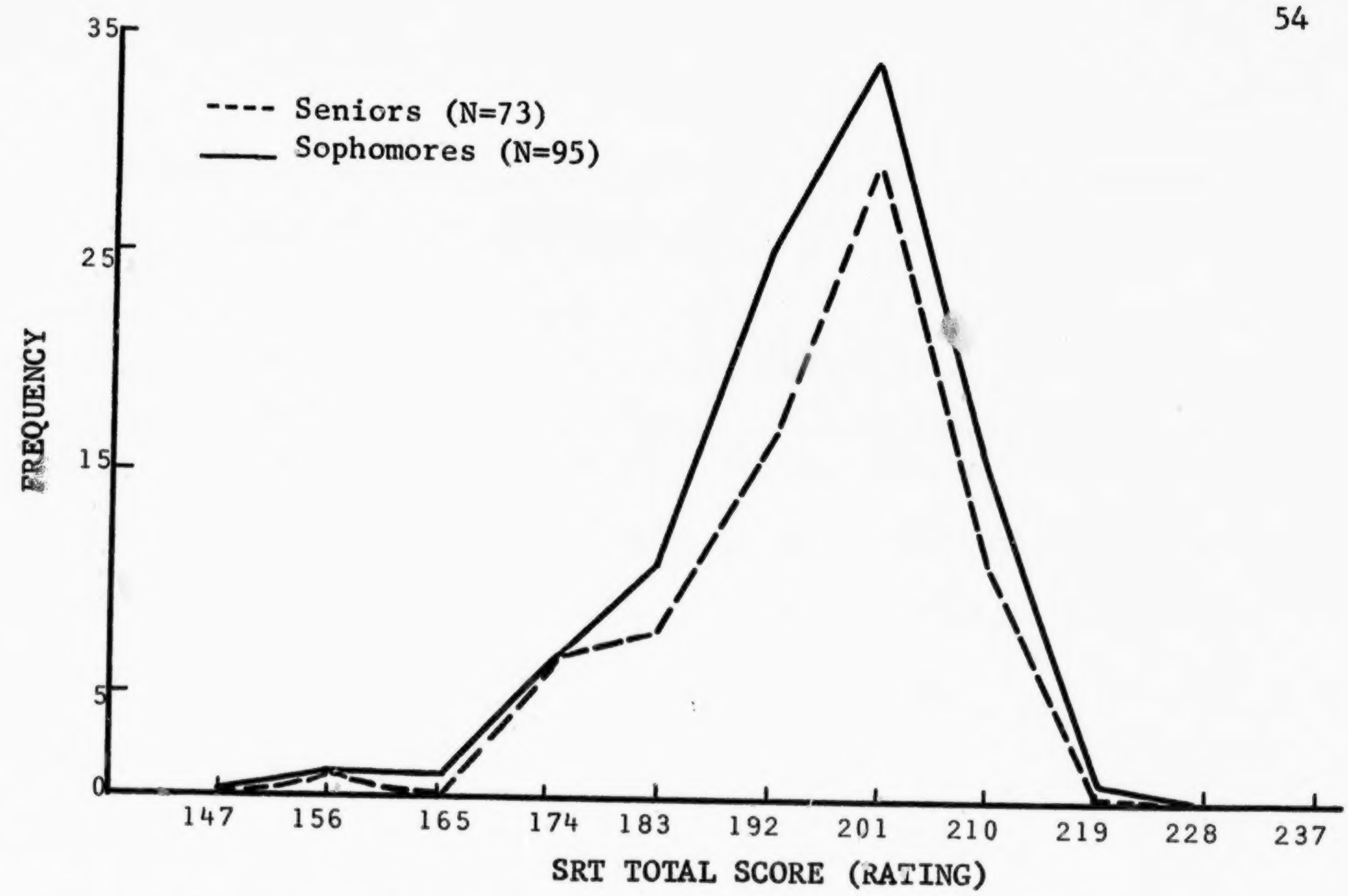


Figure 2. Distributions of SRT rating total scores for sophomore and senior boys

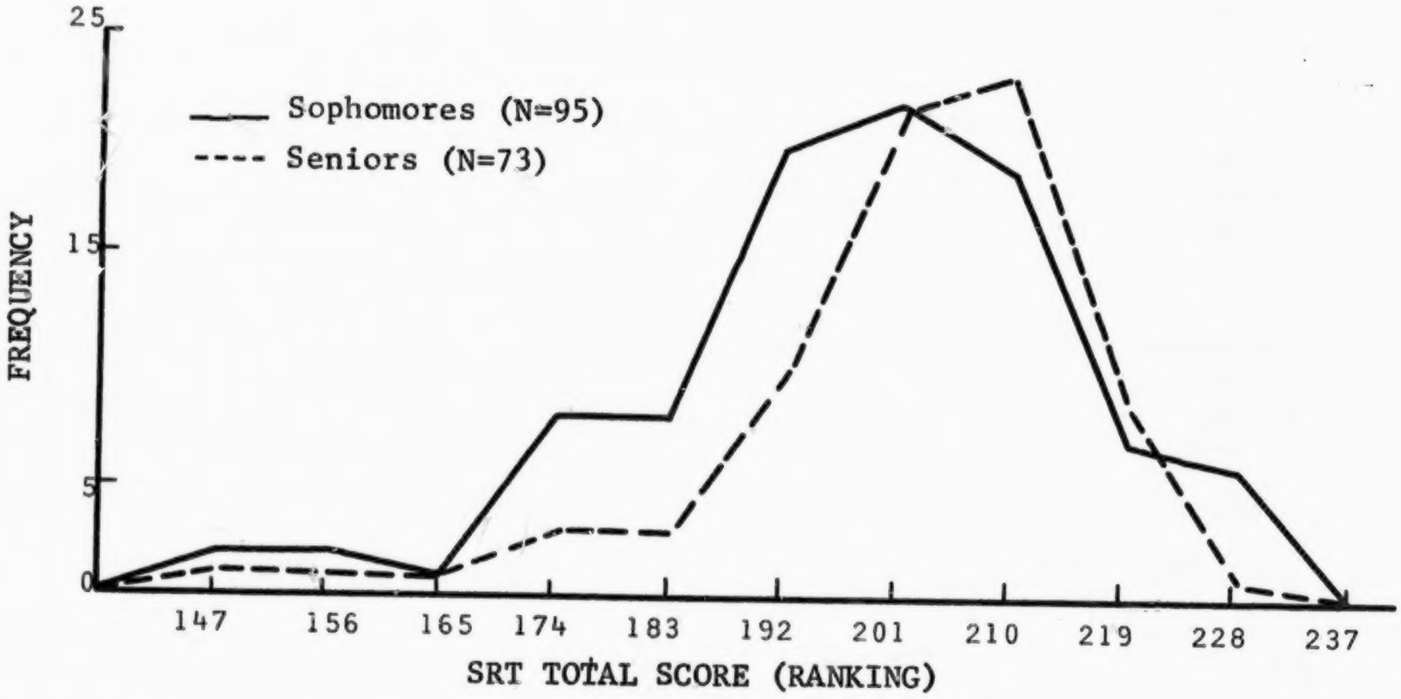
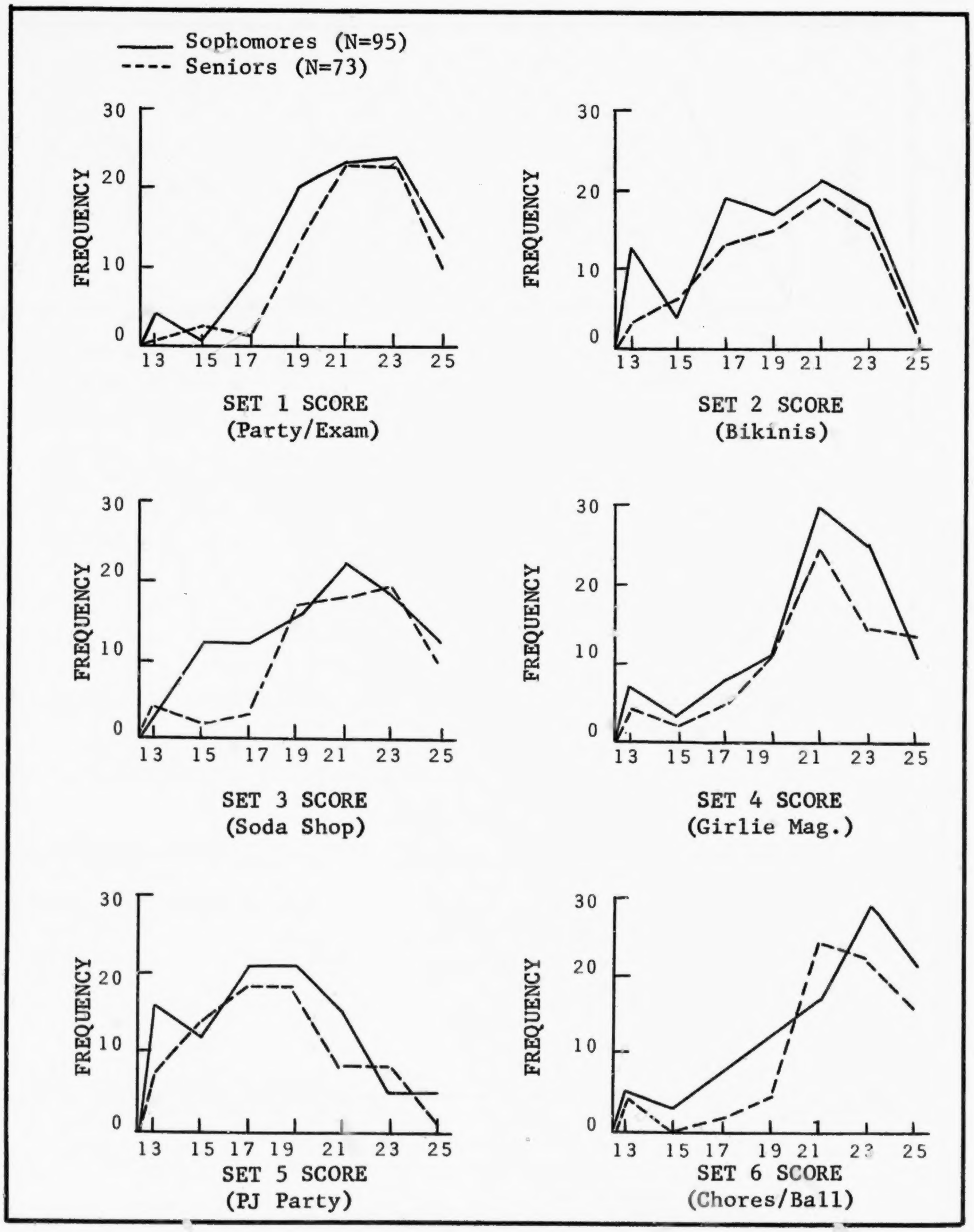


Figure 3. Distribution of SRT ranking total scores for sophomore and senior boys



SET 1 SCORE (Party/Exam)

SET 2 SCORE (Bikinis)

SET 3 SCORE (Soda Shop)

SET 4 SCORE (Girlie Mag.)

SET 5 SCORE (PJ Party)

SET 6 SCORE (Chores/Ball)

Figure 4. Distributions of SRT ranking scores for sets 1-6 for sophomore and senior boys

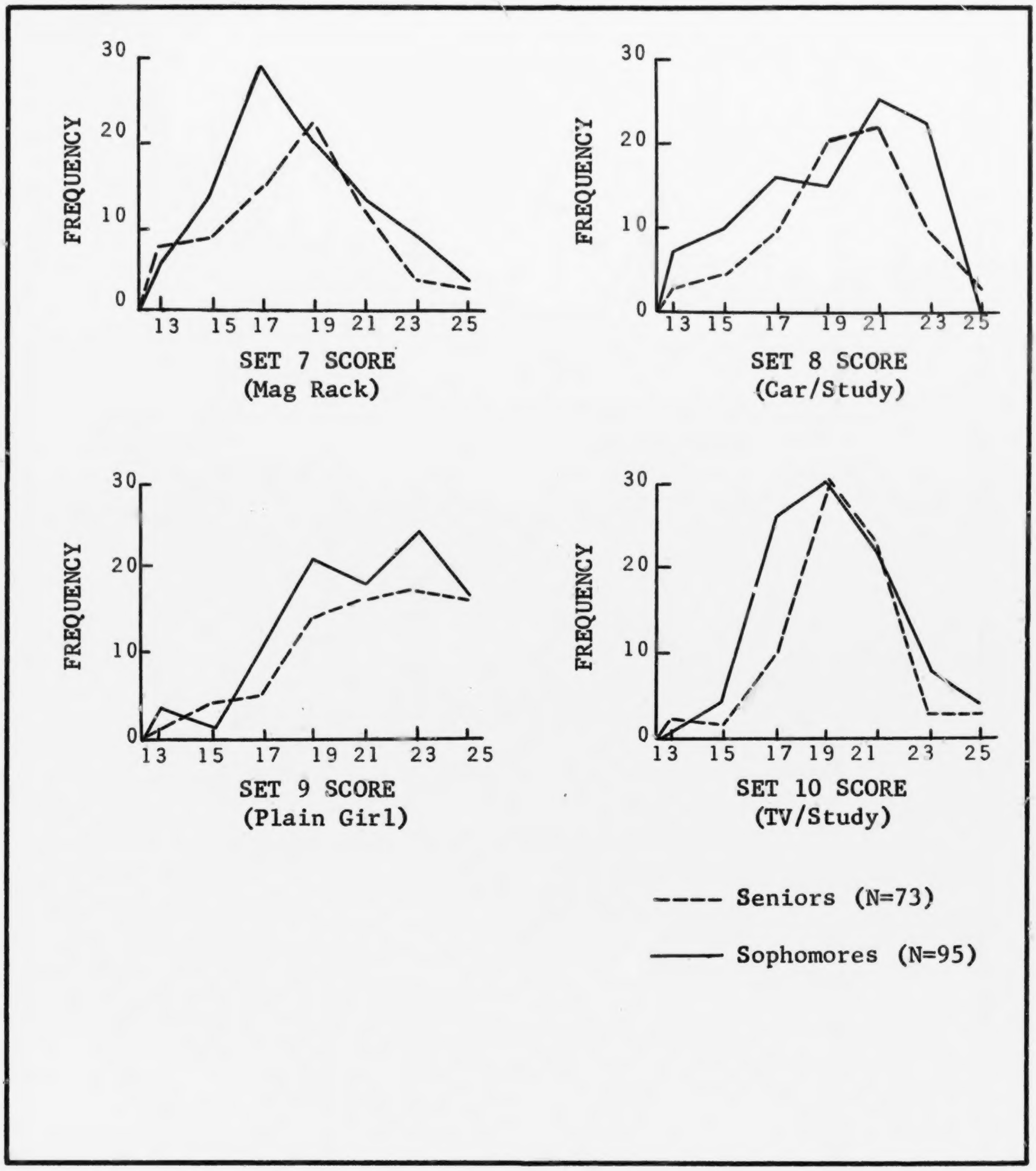


Figure 5. Distributions of SRT ranking scores for sets 7-10 for sophomore and senior boys

Table 5

Intercorrelations of SRT Picture Set Ranking Scores for Sophomore Boys ($\underline{N} = 95$)[(a)]

SUBSCALES

	Use of Time				Respect for Others		Meeting Social Expectations			Family Jobs (b)
PICTURE SET	Set #1	Set #3	Set #8	Set #10	Set #2	Set #9	Set #4	Set #5	Set #7	Set #6
1.Party/ Exam	1.00	16	19	12	26**	29**	33**	20*	14	21*
3.Soda Shop		1.00	17	08	32*	20*	06	21*	07	27**
8.Car/ Study			1.00	20*	46**	19	29**	34**	26**	21*
10.TV/ Study				1.00	21*	10	30**	08	05	22*
2.Bikinis					1.00	36**	20*	30**	15	36**
9.Plain Girl						1.00	23*	30**	-04	36**
4.Girlie Mag							1.00	15	11	35**
5.PJ Party								1.00	02	19
7.Mag Rack									1.00	17
6.Chores/ Ball										1.00

Note: Off diagonal decimals omitted

* $\underline{p}(\underline{r} \geq .20) < .05$

** $\underline{p}(\underline{r} \geq .26) < .01$

(a) Intercorrelations of picture sets within the subscales are enclosed along the diagonal

(b) Subscale 4 -- Maintenance Obligations - Family -- consists of only one set, Set 6

Table 6

Intercorrelations of SRT Picture Set Ranking Scores for Senior Boys ($\underline{N}$ = 73)$^{(a)}$

SUBSCALES

	Use of Time				Respect for Others		Meeting Social Expectations			Family Jobs (b)
PICTURE SET	Set #1	Set #3	Set #8	Set #10	Set #2	Set #9	Set #4	Set #5	Set #7	Set #6
1.Party/ Exam	1.00	32**	21	05	09	35**	35**	05	11	36**
3.Soda Shop		1.00	12	33**	04	22	23*	13	07	20
8.Car/ Study			1.00	-13	08	21	23*	08	-03	24*
10.TV/ Study				1.00	08	14	06	13	17	28*
2.Bikinis					1.00	34**	25*	-11	04	09
9.Plain Girl						1.00	40**	13	08	33**
4.Girlie Mag							1.00	31**	22	41**
5.PJ Party								1.00	12	31**
7.Mag Rack									1.00	12
6.Chores/ Ball										1.00

Note: Off diagonal decimals omitted *$\underline{p}(\underline{r} \geqq .23) < .05$

**$\underline{p}(\underline{r} \geqq .30) < .01$

(a) Intercorrelations of picture sets within the subscales are enclosed along the diagonal

(b) Subscale 4 -- Maintenance Obligations - Family -- consists of only one set, Set 6 designed to fit one of the four areas of social responsibility. The slide sets making up each subscale should thus be related on the basis of content validity.

As shown in Tables 5 and 6, this pattern was only partially obtained. In Subscale 1, for sophomores the only barely significant correlation among the four sets making up the subscale is Set 8 (Car/Study) with Set 10 (TV/Study). For seniors only Set 3 (Soda Shop--conversation about a girl or study) is correlated with Set 8 and Set 10. These correlations are higher ($p<.01$), but not as high as might be expected given the similarity of the items which all deal with reasons for studying.

In Subscale 2, for both sophomores and seniors, Set 2 (Bikinis) was significantly correlated with Set 9 (Plain Girl). In Subscale 3, for sophomores there were no significant correlations among the three sets making up the subscale; for seniors there was only one--Set 4 (Girlie Magazine in the Street) with Set 5 (PJ Party).

Subscale 4 consisted of only one set, Set 6 (Helping Parents or Playing Football). In both samples, however, Set 6 was correlated with nearly all the rest of the sets. For sophomores, Set 6 was correlated with all but Set 5 (PJ Party) and Set 7 (Girlie Magazine at a Drugstore). For seniors, Set 6 was correlated with all but Set 3 (Soda Shop), Set 2 (Bikinis), and again Set 7.

As for correlations of slide sets outside subscale boundaries, a different pattern is presented by sophomore and senior samples. As previously noted, for sophomores few correlations expected within subscales were achieved. Correlations outside of subscales present a varied pattern in the sophomore sample that defies even grouping items on the basis of presumed similarities by some form of "intuitive factor analysis." For sophomores, Set 7 (Mag Rack), which is correlated only with Set 8 (Car/Study), is the least correlated item. The most related items were Set 6 (Chores/Ball)--which was correlated with all but Set 7 and Set 5 (PJ Party)--and Set 2 (Binkinis) which was correlated with all but Set 7.

Slide set scores outside of subscale boundaries display greater independence for the senior sample than they do for the sophomore sample. Again Set 7 (Mag Rack) bears the least relation to other sets. It shares no significant correlation with any other set. Items most correlated with others were Set 4 (Girlie Mag) and, as true for the sophomores, Set 6 (Chores/Ball). Set 4 was correlated with all but Set 10 (TV/Study) and Set 7. Set 6 was correlated with all but Set 3 (Soda Shop), Set 2 (Bikinis), and Set 7.

In contrast to the varied pattern of correlations of sets outside of subscales shown by the sophomores, a pattern of correlations which is consistent and more easily interpreted is shown by senior sample. Sets 1, 4, 6, and 9 are all significantly correlated with each other with a probability of occurrence of less than .01. Some relationships between these sets are apparent. Sets 1 (Party or Study for Exam) and Set 6 (Helping Parents or Playing Ball with Friends) both involve delaying or limiting rewarding activities with peers to finish duties.

Table 7

Intercorrelations of SRT Subscale Scores for Sophomore and Senior Boys

	Sophomores (N=95)[a]				Seniors (N=73)[b]			
	Subscale				Subscale			
Sub Scale	1	2	3	4	1	2	3	4
1.Use of Time	1.00	.50***	.37***	.31**	1.00	.32**	.29*	.43***
2.Respect for Others		1.00	.26**	.42***		1.00	.23*	.26*
3.Meeting Social Expectations			1.00	.19			1.00	.39***
4.Maintenance Obligations				1.00				1.00

a) *$p(r \geq .20) < .05$

**$p(r \geq .26) < .01$

***$p(r \geq .34) < .001$

b) *$p(r \geq .23) < .05$

**$p(r \geq .30) < .01$

***$p(r \geq .38) < .001$

c) Subscale 4 consists of one set, Set 6

Set 6, Set 4 (Finding a Girlie Magazine in the Street), and Set 9 (Plain Girl) all involve varying degrees of adult or parental approval or disapproval. What all the sets share in common is open to question, but probably a generalized factor of self-direction would be most inclusive.

Intercorrelations of Subscales are found in Table 7. The four subscales correspond to the four areas of social responsibility and are thus presumed to be independent of each other. As was true of individual sets, subscales were also more independent of each other in the senior sample than in the sophomore sample, but all four subscales in both samples were significantly correlated with each other with the exception of Subscale 3 with Subscale 4 (Set 6) for the sophomore sample.

Summary

From the preceding analysis, only a moderate claim can be made for the reliability of the Social Responsibility Test. A good deal of random variation exists, particularly among the sophomore sample. A more consistent pattern of expected correlations between sets within subscales was realized in the senior sample. In addition, an interrelated pattern of correlations was found among sets outside of subscales for the seniors. Some possible relationships between these items have been suggested. The discrepant pattern presented by the sophomore sample should be considered in evaluating the correlations of SRT components with youth-culture and school background variables presented in Part II.

Part II

Correlations of Social Responsibility Test Scores with Youth-Culture and School Background Variables

Analyses reported in Part II are also based on 95 sophomore and 73 senior boys of a large urban high school. From the hypotheses presented in Chapter Two, the following relationships concerning social responsibility should be obtained: (1) A high score on the Social Responsibility Test should be positively associated with measures of competent school performance; (2) high scores on youth-culture variables, indicating greater interest in youth-culture activities, should be negatively related to school performance, and concomitantly, negatively related to higher scores on social responsibility.

In general, social responsibility measures were not found to be related to youth-culture variables in this study; furthermore, social responsibility measures and youth-culture measures were found to relate to different measures of school performance and interests. These relationships will be considered separately below.

Descriptive statistics showing means and standard deviations of youth-culture and school background variables are shown in Table 8.

The Relation of Social Responsibility Test Measures to Youth-Culture Scores:

Scores for seven youth-culture variables which were obtained from the youth-culture portion of the Social Interests Inventory were available for each subject from a separate study of these same subjects (Grinder, 1967). As previously mentioned, it was hypothesized that

Table 8

Descriptive Statistics for Youth-Culture Scores and School Data for Sophomore and Senior Boys

TEST VARIABLES	Sophomores (N = 95) Mean	Sophomores (N = 95) SD	Seniors (N = 73) Mean	Seniors (N = 73) SD
A. Youth-Culture Scores				
Status-Seeking Independence	55.52	12.62	49.49	10.16
Assertion	57.61	15.72	53.40	11.97
Sex	60.41	14.95	55.97	14.41
Solitary	41.41	9.75	37.19	8.22
Few Friends	41.47	11.40	36.05	9.06
Clique-Crowd	45.39	11.12	42.92	9.26
Dating	45.04	10.99	42.66	9.91
Total YC Score	173.52	38.35	158.85	25.41
B. School Data				
Age (Months)	191.17	6.89	213.17	5.32
Absences	9.91	13.18	9.39	11.32
Reading Aptitude	61.99	24.65	72.06	20.64
Total Test Aptitude	53.61	24.34	65.11	23.90
Credits	2.66	3.38	4.09	1.00
Curriculum	1.66	.47	1.39	.49

excessive interest in youth-culture activities should be negatively associated with interest in school and with social responsibility as it has been defined in this study. Although the youth-culture measures were correlated highly with each other in both samples, the negative correlations predicted between the youth-culture variables and the social responsibility measures were not obtained.

Of 91 correlations, there were no significant correlations of any of the SRT variables with any of the youth-culture measures in the senior sample with the one exception of Set 6 (Help Parents or Play Football with Friends) which was correlated with the dating subscale ($\underline{r} = .25$, $\underline{p} < .05$). In the sophomore sample, only Set 10 (Watch TV or Study) is correlated with any of the youth-culture measures. In the absence of any other support for the hypothesized relationship between social responsibility and interest in youth-culture, Set 10 is inexplicably correlated with all seven youth-culture scales, suggesting more than chance correlation. (Set 10 is correlated with status-seeking and dating with $\underline{r} = -.30$ and $-.35$ respectively; $\underline{p} < .01$ in both cases. Its correlation with the other five scales range from $-.21$ to $-.24$, all with $\underline{p} < .05$.)

Thus, little support was obtained for the negative relation predicted in Hypothesis Two between the youth-culture and social responsibility scores. With the above exceptions, the intercorrelations between the Social Responsibility Test scores and the seven youth-culture variables have not been tabled since the relationships in all cases were of a low magnitude and nonsignificant. Intercorrelations between the Social Responsibility Test scores and the seven youth-culture scores are rarely above ±.09, and fall in a range between .00 and ± .05.

However, the youth-culture variables were found to relate to two measures of performance and interest in school--the number of absences in half-days and the number of school credits. In the sophomore sample, a high score on all seven youth-culture variables is positively correlated with the number of absences ($p < .01$ with the exception of solitary which has $p < .05$); and a high status-seeking score is correlated negatively with the number of credits ($p < .01$). (See Table 9.) In the senior sample, a number of youth-culture scores are related to absences and to credits (see Table 10). In contrast, nearly all of the picture set scores show a very small correlation with absences and credits.

The youth-culture variables, furthermore, were not found to be correlated significantly with the three measures found correlated with the Social Responsibility Test scores. No significant correlations were found between the youth-culture variables and scholastic aptitude, reading, or school program with the exception of status-seeking which correlates with scholastic aptitude in the sophomore sample. The relation of social responsibility scores to school variables is discussed below.

TABLE 9

Intercorrelations of Youth-Culture (YC) and Social Responsibility Test (SRT) Scores with School Data for Sophomore Boys[a]

	SCHOOL DATA				
INDEPENDENT VARIABLES	Age	Absences	Schol. Aptit. Test Scores	Credits	School Program
YC Scores					
Status-Seeking Independence	.00	.33**	-.14	-.27**	.21*
Assertion	.05	.31**	-.04	-.05	.10
Sex	.00	.39***	-.11	-.17	.13
Solitary	-.01	.24*	-.11	-.18	.17
Few Friends	.00	.33**	-.10	-.10	.12
Clique-Crowd	.02	.36***	-.03	-.15	.13
Dating	.06	.40***	-.13	-.19	.14
SRT Scores					
Total Score	-.11	-.03	.29**	-.02	-.32**
Subscale 1	.00	-.03	.18	.00	-.15
Subscale 2	.00	.02	.24*	-.07	-.20*
Subscale 3	-.25	-.04	.24*	-.01	-.34***
Subscale 4[b]	-.17	-.10	.33**	.02	-.39***

a) For N = 95

$^{*}p(r \geq .20) < .05$

$^{**}p(r \geq .26) < .01$

$^{***}p(r \geq .34) < .001$

b) Subscale 4 contains one set, Set 6

Table 10

Intercorrelations of Youth-Culture (YC) and Social Responsibility Test (SRT) Scores with School Data for Senior Boys[a]

	SCHOOL DATA				
INDEPENDENT VARIABLES	Age	Absences	Schol. Aptit. Test Scores	Credits	School Program
YC Scores					
Status-Seeking	-.02	.13	-.10	-.14	.08
Independence Assertion	.15	.19	.00	-.26*	.03
Sex	.11	.40***	-.05	-.33**	.00
Solitary	.08	.14	-.08	-.28*	.09
Few Friends	.17	.32**	-.11	-.34**	.12
Clique-Crowd	.00	.27*	-.08	-.23*	.03
Dating	.10	.27*	.07	-.19	-.10
SRT Scores					
Total Score	-.37**	-.05	.37**	.16	-.42***
Subscale 1	-.21	-.04	.23*	.27*	-.35**
Subscale 2	-.36**	-.23*	.48***	.21	-.52***
Subscale 3	-.36**	.03	.23*	-.06	-.15
Subscale 4[b]	.00	.07	.05	-.03	-.10

a) For N = 73

$*p(r \geqq .23) < .05$

$**p(r \geqq .30) < .01$

$***p(r \geqq .38) < .001$

b) Subscale 4 contains one set, Set 6.

Table 11

Intercorrelations of SRT Picture Set Scores with School Data for Sophomore and Senior Boys

	SCHOOL DATA				
	Age	Absences (Days)	Schol. Aptit. Test Scores	Credits	School Program
PICTURE SET	SOPHOMORES (N=95)[a]				
1. Party/Exam	-.09	.07	.15	.04	-.12
2. Bikinis	.04	-.03	.14	-.09	-.16
3. Soda Shop	-.15	-.02	.04	-.04	-.01
4. Girlie Mag	-.19	-.03	.14	.03	-.22*
5. PJ Party	-.12	-.10	.14	-.10	-.15
6. Chores/Ball	-.17	-.09	.33**	.02	-.39***
7. Mag Rack	-.08	.13	.04	.05	-.18
8. Car/Study	.23*	.01	.11	-.03	-.05
9. Plain Girl	-.05	.07	.25*	-.01	-.18
10. TV/Study	.05	-.17	.17	.04	-.23*
PICTURE SET	SENIORS (N=73)[b]				
1. Party/Exam	-.13	-.02	.18	.17	-.28*
2. Bikinis	-.22	-.20	.34**	.07	-.39***
3. Soda Shop	-.12	-.06	.14	.40***	-.20
4. Girlie Mag	-.36**	.03	.39***	.07	-.21
5. PJ Party	-.20	-.04	.12	-.03	-.11
6. Chores/Ball	.00	.07	.05	-.03	-.10
7. Mag Rack	-.22	.04	.03	-.05	-.04
8. Car/Study	-.12	.17	.19	.06	-.13
9. Plain Girl	-.36	-.16	.44***	.27*	-.45***
10. TV/Study	-.10	-.20	.02	-.05	-.26*

a) *p(r ≧ 20) < .05
**p(r ≧ 26) < .01
***p(r = 34) < .001

b) *p(r ≧ 23) < .05
**p(r ≧ 30) < .01
***p(r ≧ 38) < .001

Social Responsibility and School Background Variables

As shown in Tables 9-11, significant relationships are present, in general, between the social responsibility measures and three measures of school performance. Students who received higher SRT scores scored higher on reading ability and overall scholastic aptitude. (These latter scores were obtained from school records.) Reading scores were highly correlated with the total test scores of scholastic aptitude for both sophomores (r = .82) and senior (r = .91) samples. Therefore, only the total test score of scholastic aptitude has been tabled in correlation matrices which follow. The third school background variable found related to SRT scores was curriculum. Students in college preparatory school programs (coded as 1) tended to score higher on social responsibility, as it has been measured, than did students in general school programs (coded as 2). The exceptions to this pattern were Subscale 1 for the sophomores and Subscale 4 (i.e., Set 6) for the seniors. Neither of these two sub scales was related to school aptitude or school program in their respective samples.

The only other significant correlation between SRT and school background variables for the sophomores is between Subscale 3--Congruity with Social Expectations--and age. Older sophomore boys obtained lower scores on this subscale. Yet none of the individual slide sets, including those comprising Subscale 3, is significantly correlated with age, with the exception of Set 8 (Polish Car or Study). (Compare Table 11.) (Set 8, displaying an anomalous pattern, is positively correlated with age, indicating older sophomores chose the more responsible alternatives of that protocol than did younger sophomores.)

In the senior sample, total SRT score and Subscales 2 and 3 were also all significantly correlated with age in the expected direction. In addition, Subscale 2 is also correlated with absences, and Subscale 1 is significantly correlated with credits--the only subscales to be correlated with those variables for either the sophomore or senior samples.

However, nearly all of the above correlations result largely from the influence of a few individual sets making up the subscales. Indeed, as shown in Table 11, only a few sets contribute the significant relationships. For sophomores, the pattern of correlations with school variables is spotty. Only Set 6 (Helping Parents or Playing Football with Friends) is correlated with more than one of the school variables (those being scholastic aptitude and school program), and it also bears the most significant relationship to these two variables of any of the ten slide sets.

In contrast to the pattern presented in the sophomore sample, in the senior sample individual slide sets contribute somewhat greater combined influence to subscale scores with certain exceptions. Set 8 (Polish Car or Study) contributes little to Subscale 1. Set 5 (PJ Party) and Set 7 (Girlie Magazine at a Magazine Rack) contribute little to Subscale 3. Their highest correlations are with age but neither is significantly related to any of the five school variables.

Further, contrary to the sophomore sample, Set 6 is totally unrelated to school variables for the seniors, its highest correlation being with school program (-.10).

Most effective sets for the seniors are Set 2 (Bikinis) and Set 9 (Plain Girl), both of which comprise Subscale 2--Respect for Others' Rights. Next most effective are Set 4 (Girlie Magazine in the Street) and Set 3 (Soda Shop--Conversation about a Girl or Study). In Part III, attempt will be made to examine the effectiveness of these variables alone in predicting the criterion variables.

Summary

Little support was found for the hypothesized relationships between high youth-culture interests and low social responsibility as it has been measured. Social Responsibility Test scores were almost totally unrelated to scores indicating youth-culture interests. Partial support was obtained for the hypothesis that high social responsibility should be related to greater scholastic competence and to interest in school. Higher social responsibility scores were found related to higher scores on scholastic aptitude and to a greater tendency to be enrolled in a college-bound rather than a general school program. Few relationships were found between social responsibility measures and number of absences or number of credits. In contrast, youth culture measures were related to these latter variables, but they were unrelated to scholastic aptitude and school program. Where relationships were found between youth-culture and school variables, high youth-culture scores were related to high absences and to fewer credits in school.

The effectiveness of different picture sets in predicting school performance in the sophomore and senior samples was also discussed. In contrast to the sophomore sample where a spotty pattern of relationships is present, in the senior sample four of the ten sets seem to exert the greatest influence. In Part III, attempt is made to examine the effectiveness of these variables.

Part III

As shown in Parts I and II, a pattern of picture sets which are related to each other and which share varying degrees of significant relationships to criterion school background variables is present in the senior sample. This section deals with the attempt to examine the effectiveness of using just these variables in predicting school background variables. Such a pattern is not present in the sophomore sample. Therefore this part will employ only the senior sample.

Total Youth-Culture and Best Sets Scores

Two additional scores, a total youth-culture score and a variable called Best Sets, have been computed, and the relationship of each to school background variables has been examined. A total youth-culture interest score was computed by adding the three subscale scores representing youth-culture motivation: Status-seeking, independence-assertion, and sex. (The same score could be obtained by adding across the four context subscales: solitary, few friends, clique-crowd, and dating. These scores were in fact summed as a computational check.) This total youth-culture scale was then correlated against all of the SRT variables and against the five school background variables. The second variable, Best Sets, will be discussed later below.

Relation of Total YC Score to SRT and School Variables

As could be expected from the lack of correlation between individual YC subscales and SRT variables, few significant relationships between total YC score and SRT variables were obtained. Only one barely significant correlation was found for the sophomore sample--that being with Set 10 ($r = .20$, $p = .05$). Thus, correlations of YC total with SRT variables have not been tabled for the sophomore sample.

As shown in Table 12, in the senior sample the total YC score is negatively correlated (i.e., high YC scores with low SRT scores) with the following SRT variables: total score; Subscales 1 and 2; and Sets 2, 3, and 9. It appears to be the three picture sets--Set 3 (Soda Shop) in Sub Scale 1 and Sets 2 (Bikinis) and 9 (Plain Girl) in Subscale 2--which exert the most influence upon the relation of the SRT subscales and total scores to the YC total

Higher total YC scores are significantly correlated with higher absences from school and with a general school program. Higher total YC scores approach, but do not attain, a significant negative correlation with scholastic aptitude and number of school credits.

TABLE 12

Correlations of YC Total Scores and Selected SRT Scores with Each Other and with School Data for Senior Boys[a]

		SCHOOL DATA				
YC and SRT SCORES	YC Total Score	Age	Absences	Schol. Aptit. Test Scores	Credits	School Program
YC Total	1.00	.16	.29*	-.20	-.20	.35**
SRT Total	-.25*	-.37**	-.05	.37**	.16	-.42***
Best Sets[b]	-.30**	-.40***	-.15	.49***	.30**	-.47***
Sub 1	-.29*	-.21	-.04	.23*	.26*	-.36**
Sub 2	-.37**	-.36**	-.23*	.48***	.21	-.52***
Sub 3	.01	-.36**	.03	.23*	-.06	-.15
Sub 4 (Set 6)	-.04	.00	.07	.05	-.03	-.10
Set 2	-.32**	-.22	-.20	.33**	.07	-.39***
Set 3	-.23*	-.12	-.06	.14	.40***	-.20
Set 4	-.01	-.36**	.03	.39***	.07	-.21
Set 9	-.28*	-.36**	-.16	.44***	.27*	-.45***

a) For $N = 73$
*$p(r \geqq .23) < .05$
**$p(r \geqq .30) < .01$
***$p(r \geqq .38) < .001$

b) The variable Best Sets is a total of scores for Subscale 2 (Sets 2 and 9) and Sets 4 and 5.

The Relation of Best Sets to School Variables

In Part I of this chapter a pattern of consistent intercorrelations of SRT picture Sets 1, 4, 6 and 9 was shown to have occurred in the senior sample, and attempt was made to interpret the relationships these four picture sets might share in common. Also, as shown in Part II, the most effective sets for seniors are, in order: Set 2 (Bikinis) and Set 9 (Plain Girl) both of which comprise Subscale 2; Set 4 (Girlie Magazine in the Street); and Set 3 (Soda Shop Conversation about a Girl). The relationship between Sets 2, 3, and 9 and the YC total score has been discussed.

From these considerations, four picture sets--Sets 2, 3, 4, and 9--were selected and the relationships of just these picture sets to school variables were examined. Scores for the four individual sets were summed to form a variable called Best Sets which was then correlated against the total YC score and the five school background variables. These correlations are presented in Table 12.

Correlations of the SRT total score, four subscale scores and of the four individual picture sets making up the Best Sets variable have been included in Table 12 for comparison. As shown, the variable Best Sets allows prediction of the five school background variables (with the exception of absences) with somewhat greater certainty than do either of the YC or SRT total scores. However, Subscale 2--made up of Set 2 and Set 9--is an even better predictor of the five school variables and of total YC score than either Best Sets or total SRT score. The predictive effectiveness of different SRT variables is explored further in the section which follows.

Multiple Correlations of SRT and School Variables as Predictors of Each Other:

Multiple correlations were computed using three combinations of SRT scores as independent variables. These were: (1) All ten SRT picture sets, (2) the sets used to form the Best Sets variable (Sets 2, 3, 4, and 9), and (3) Sets 2 and 9. Total youth culture and scholastic aptitude scores served as dependent variables. These correlations are found in Part A of Table 13. A multiple correlation of Sets 2, 3, 4 and 9 is nearly as effective in predicting scholastic aptitude and youth-culture interests as one using all ten sets. A multiple correlation formed from Sets 2 and 9 is nearly as effective in predicting scholastic aptitude, but it shares somewhat less variance in common with total youth-culture scores than do the other two multiple correlations.

Social responsibility and total youth-culture scores have also been employed as dependent variables, and a multiple correlation coefficient computed from school background information (consisting of age, absences, scholastic aptitude, and credits) has been used to predict them. This admittedly represents a high degree of experimental equivocation and milling about amongst the data. But the research reported here is intended as an evaluation of the instrument. For this purpose it is equally instructive to know to what extent SRT scores can be predicted given a knowledge of school performance, as is the reverse. (The question of criteria to use in a study of this sort is a problem that is discussed more extensively in Chapter IV, Discussion.) Multiple correlations of school variables with SRT and YC variables are found in Part B of Table 13. Knowledge of school performance scores is most effective in allowing prediction of the Best Sets score (a total of Sets 2, 3, 4, and 9) and the Subscale 2 score (a total of Sets 2 and 9). It is somewhat less effective in allowing prediction of the total SRT score (a total of all ten picture sets). It is least effective in predicting the total YC score.

These findings are hardly surprising since Subscale 2 and Best Sets items were deliberately chosen as the best items. These relationships are included here mainly to allow assessment of which components of the Social Responsibility Test share the greatest variance with school and youth-culture variables.

Table 13

Social Responsibility Test Scores and School Variables as Multiple Predictors of Each Other for the Senior Sample

Single Scores Used as Dependent Variables	Independent Variables Used as Multiple Predictors		
	(A) Social Responsibility Test Scores		
	Sets 1-10	Sets 2, 3, 4 and 9	Sets 2 and 9
Total YC Score	.46	.44	.35
Scholastic Aptitude Score	.57	.53	.49
	(B) School Performance Scores (Age, Absences, Scholastic Aptitude, and Credits Combined as a Multiple Predictor)		
Best Sets Total (Sets 2,3,4,9)		.57	
Subscale 2 (Sets 2,9)		.53	
Total SRT Score (Sets 1-10)		.45	
Total YC Score		.36	

IV

SUMMARY AND DISCUSSION

There are many causes of disinterest in school. The present study has proposed that one of these causes may be the characteristic attitudes that the student possesses not only toward the school but toward adult patterns of socialization in general. The relation of styles of thinking to behavior has been explored in Chapter I, and it has been suggested that the ability to perceive what constitutes responsible behavior is a necessary prerequisite to successful classroom performance. This is not to say that a univocal relationship is presumed between thought and behavior. It is presumed, however, that the ability to discriminate and choose among conflicting alternatives of varying responsibility is a precondition to competent classroom performance. The construct of social responsibility, introduced in Chapter I, incorporates this assumption. Briefly, the notion of social responsibility may be defined as the ability to perceive particular cues which will lead to accountability for one's own behavior, also implying the ability to anticipate the consequences of one's own actions.

Ten situations were constructed to form a Social Responsibility Test (SRT). Each situation involves a conflict and five alternative responses of varying degrees of responsibility to resolve the conflict.

The ten situations were each constructed to fit one of four subscales. While interpretation of the four subscales is restricted by the small number of items included in each of them, and there is some question about whether the subscales are mutually exclusive, the construct of social responsibility is perhaps made clearer by examination of what the subscales were at least _intended_ to measure.

The relevance of social responsibility to school performance emerges by fitting each of the four subscales to a more general consideration such as "effective behavior within the school." A high score on Subscale 1--_Capacity for Apportioning Resources-Time_--was intended to identify the high school boy who is able to allocate his time efficiently to meet the requirements for proficient school attainment and still retain a portion of his time for family activities, peer interaction, and pursuit of his own special interests. Subscale 2--_Respect for Others' Rights_--suggests that one who scores high on social responsibility acts in accordance with what is just or proper concerning others. Thus, the socially responsible high school student is one who is concerned about his actions as they affect his fellow students, teachers, administrators, and other school personnel (e.g., he does not impose his standards upon another in styles of dress, conduct, etc.). Subscale 3--_Congruity with Social Expectations_--relates to conformity to societal demands and the use of discretion in social situations. Thus one who is socially responsible is able to discipline himself so that he can adjust to the school situation and conform to its rules. Subscale 4--_Maintenance Obligations_--was conceived of as including the sense of obligation to school, family, and societal institutions. Certain obligations are present within the school situation beyond class requirements, such as serving on student committees. Beyond the school there are family and community obligations. Each of these considerations was incorporated into at least one picture set.

Overall reliability of the Social Responsibility Test indicates quite good internal consistency, as measured by the Hoyt analysis of variance method, when a "forced choice" ranking method is employed. Much lower reliability and predictive validity were obtained when subjects were allowed to rate each of the alternatives of each slide set on a five point rating scale. Two explanations were offered earlier to explain this difference. The rating method not only allows and encourages response sets, but it also requires less attention to cues incorporated within the alternatives. As shown in Figures 2 and 3, the ranking method not only yields a greater range of scores, but also a distribution of scores that is somewhat less negatively skewed than that yielded by the rating method. Both distributions, however, indicate that the instrument is somewhat lacking in "top"--i.e., the test is somewhat too easy or obvious. This lack of top probably hampers both the reliability and the validity of the test for the present sample. A somewhat more symmetrical distribution of scores is likely were not only the test made longer by the addition of items but also if the items were made more difficult by making the discriminations harder. The bunching up of higher SRT scores is probably also a result of the sample which was composed entirely of boys still in school.

With the inclusion of drop-outs, a wider range of abilities and attitudes could be expected, and hence more SRT scores at the lower end of the distribution. (The question of ability is treated below.) The differences between the rating and the ranking methods and the somewhat skewed distribution should both be considered in any subsequent research with the instrument.

The reliability of subscales is fairly good with the exception of Subscale 3--Congruity with Social Expectations. However, the integrity of the subscales, as measured by the intercorrelations of scores on the sets of which they are composed is subject to question. Only the picture sets of Subscale 2--Respect for Others' Rights--are more highly correlated with each other than with picture sets outside the subscale. Thus it may be argued that subscale boundaries based on areas of social responsibility have little influence on the intercorrelations of picture set scores.

The lack of integrity of subscale boundaries is especially pronounced in the sophomore sample. For the sophomores, neither *a priori* groupings or groupings after the fact appear to occur. In the senior sample, a cluster of picture set scores can be identified which are significantly related to each other and to the independent variables of the study. These picture sets appear to have two factors in common: the ability to delay rewarding activities to finish prescribed duties and the regard for adult approval or disapproval. It appears from this that perhaps a generalized factor of self-direction offers the greatest explanatory potential of any effectiveness of the current instrument and provides the most useful clue regarding the development of additional items.

Analysis of the relation of SRT scores to the two sets of criteria selected to test validity indicates that conclusions regarding its effectiveness are restricted by two general considerations: (1) The effectiveness of the instrument is limited largely to four picture sets; and (2) Although the relationships in two samples present similar patterns, clear relationships exist in the senior sample only.

Little support was obtained for the hypothesis that high youth-culture interest would be inversely related to SRT scores. A significant inverse correlation was obtained in the sophomore sample between Set 10 and all seven YC scores, but it was the only SRT variable to show any consistent relationship to YC variables in either the sophomore or senior samples. The use of total YC score lends some support to the relationship between SRT variables and interest in YC but only for seniors. However, even in the case of the seniors, it appears that three picture sets--Sets 2, 3, and 9--exert most of the influence on the significant correlations that were obtained. These three picture sets are also among the picture sets found most closely related to school variables. Thus it is difficult to make any clear interpretation of the relationship of social responsibility to interest in youth-culture activities.

Greater support was obtained for the hypothesized relationships of social responsibility and youth-culture scores to school performance. However, interpretation of the three sets of variables is complicated by the fact that SRT and YC variables were found to be related to different school variables and also by the question of scholastic ability, especially intelligence, which was uncontrolled in the present study.

Where significant relationships were found between YC and school variables, high YC scores were related to high absences and lower credits but were unrelated to scholastic aptitude or school program. In contrast, SRT scores were largely unrelated to either absences or credits, but significant correlations were obtained between SRT scores and both scholastic aptitude and school program. (Again a variable pattern of relationships was found in the sophomore sample, and consistent relationships obtained in the senior sample were influenced most by the effect of four Sets--2, 3, 4, and 9.)

The finding that SRT and YC variables are related to different school variables raises the question of what variables should be chosen as criteria for validation. Age, absences, scholastic aptitude, credits, and school program are all influenced both by interest in school and by measures of ability, particularly intelligence. However, absences and the number of credits in school are purer measures of high or low interest in school than scholastic aptitude or school program. The hypothesized relationship between low academic interest and high interest in youth culture is supported by the above findings while the relationship between low interest in school and low social responsibility received less support.

The better items of the SRT however, do show a significant positive relationship to measures of scholastic competence. Furthermore, when the four best picture sets of the SRT are used as multiple predictors (in an admittedly post hoc empirical fashion), they provide better prediction of school performance scores than does the total YC score. However, the decided confounding of all of the school variables with ability (especially the two variables most related to SRT scores, scholastic aptitude scores and school program) denies clear interpretation of the results. To be a useful construct, social responsibility should be relatively independent of intelligence. The failure to control adequately for intelligence in the present study represents a methodological flaw that prevents unequivocal interpretation of the results.

A futher limitation of the present research is that it has dealt entirely with "stay-ins," thereby limiting any generalizations which can be made to actual drop-outs. To be more useful future research should include samples of actual and potential drop-outs as well as persisting students. Attempt should be made to control ability within each of these groups by including students who are dropping out or have dropped out of school not for the lack of ability but for lack of interest. While this is difficult to do since the more able students are probably also the most interested, it should at least be possible to exert some statistical controls, e.g., through a randomized block design or by covariance techniques.

However, it is highly desirable to do more in any subsequent research than to merely "control for intelligence" either directly or statistically, for one may seriously challenge a unitary concept of intelligence. It is interesting to note that the SRT shows similarity both in format and in what it is intended to measure to two subscales of the Wechsler Intelligence Scales (though the similarity was entirely unintentional). These are the picture arrangement and the picture completion subscales. This similarity is strongly supported by discussion of these two subscales by Glasser and Zimmerman (1967) in their recent survey of studies dealing with the subscales of the Wechsler Intelligence Scale for Children (WISC). They state, for example, that the picture arrangement task is the best single measure of general intelligence among the performance scale tests, particularly at ages 7 1/2 to 10 1/2. However, they also state that in addition to providing measures of intelligence, the picture arrangement task provides an opportunity for a variety of personality and behavior observations to be made. The conclusions to be drawn from performance on the picture arrangement task lend support to the many non-intellective behavioral variables discussed in Chapter I.

Directly relevant to the definition and description of social responsibility in Chapter I, Glasser and Zimmerman (1967) state:

> Performance on picture arrangement may indicate social alertness and common sense, as revealed in the application of so-called 'social', that is intelligence applied to social or interpersonal situations (p. 76).

In contrast to picture arrangement, the picture completion task represents one of the poorer measures of general intelligence on the WISC, but good performance on the task does require attention and concentration and the ability to determine essential rather than irrelevant aspects of a picture. Low scores arise from poor attention and concentration. High scores arise from the ability to form learning sets, excessive conformity, strong attention to detail, and perfectionism. Taken in combination, the picture arrangement and picture completion tasks reflect a good many of the non-intellective aspects of behavior which the SRT has intended to measure.

One conclusion to be reached in the present study is that the stimulus materials used presented a fairly difficult concept learning task to the subjects. The complexity of the illustrations and the subtlety of the cues require a good deal of analytical reasoning in order to arrive at the correct alternatives. One assumption of the present study, however, is that the ability to discriminate cues is a precondition to responsible behavior. Discrimination of the cues does not guarantee responsible behavior, i.e., assure correspondence between thought and action--but it is also true that the inability to discriminate the cues associated with effective behavior makes such behavior unlikely to occur.

An important aspect of the present study which has not yet been discussed relates to the technique and methodology employed. The uses of visual materials, such as 35 mm. slides, is not a new technique. However, the depiction of the particular conflict situations expressly directed toward adolescents which were employed in this study is rather novel. One of the planned, but so far unexplored, aspects of the study is the application to other areas of the techniques which were used.

Tentative conclusions drawn from field testing and subsequent interviews with subjects suggest that the technique is germane to the classroom. Use of the picture sets as discussion stimuli would lend themselves well to classroom situations. The comic strip format is not only familiar but intrinsically interesting. The use of pictures also avoids many of the problems associated with reading difficulties. The various picture sets elicited an abundance of diverse discussion from test subjects during the development of the pictures. Responses of this type indicate that adolescent boys are interested in discussing the various implications inherent in the various conflicts portrayed in the picture sets.

Other possibilities for a broad adaptation of the technique include adaptation into "game" materials. In this context participants would be asked to make certain decisions, based upon alternatives provided them, as the game progressed. The motivational aspects of the game could be increased by the addition of a system of rewards; thus, the participant could be rewarded or punished for the decisions which he made at the various choice points in the game. Since the alternatives available to the participant would be very realistic, the subject would actually be playing a game of "real life." If certain presumptions in the field of learning are accepted (transfer, generalization, etc.), it would be expected that the acceptable solutions (discrimination of appropriate cues) which the subject learns in this situation should generalize to real life situations with the result that the subject should be able to deal more effectively with his environment.

Using the picture sets as projective devices is another application of the technique suggested by the field testing. The most efficient use of the picture sets would be made by adapting the various conflict situations, minus the alternatives, to a projective type slide. Participants could be asked to interpret each conflict situation and tell a story on their interpretation of the illustration. Some type of scoring procedure would be required for the stories before any individual assessments could be made. From the assessments it should be possible to determine the subject's orientation toward school performance, youth culture participation, parental relations, and other factors.

However, there are problems to be faced regarding the use of pictures. It is extremely difficult to incorporate only the cues intended within a picture. It is equally difficult to determine exactly what cues within the picture influence the subject's ranking of it. For example, in the statement "I would date a girl who was fun to be with even though she was not too attractive," everyone knows the girl referred to even though it is probably a different girl for each person. Yet it is difficult to portray "fun to be with," "personality," or other subjective interpretations so that each person would agree that that, and only that, was what was shown.

Beyond the question of interpretation, there are technical problems associated with the development of pictures. The development of a picture is a far more complex process than the wording of an item in a questionnaire. Furthermore, changes are more difficult to make. The result of the large amount of time spent on the development of each picture set was that only a small number of picture sets were available to test. Also, while slides were useful for group testing, it was often difficult for everyone in the group to see all of the pictures clearly if groups were too large. Thus, while slides are useful in the development of the instrument and color adds intrinsic interest, simple line drawings printed in booklets or cards might be advisable toward the end of developing more pictures for testing.

Lastly, a very important consideration to be made in any subsequent development of picture sets is the relevance the conflict situations and the cues incorporated in them can be expected to have for the disaffected student. For example, parties and school success may have significance for a middle-class adolescent but be irrelevant both to the experience and expectations of a less advantaged boy. Kagan (1966b) suggests that a child who has experienced chronic failure may enter into a situation with a strong expectation of failure, but little anxiety about failure. Generalizing from this assumption, one would expect potential dropouts to view an alternative associated with fear of failure with little anxiety, and as a result consider that alternative as irrelevant to responsibility. This particular conclusion may explain in part the unsatisfactory results received from those picture sets which included fear of failure alternatives. Subsequent research should look beyond the notions of achievement and ability to an examination of the specific attitudes, values, and cognitive styles which distinguish persisting from non-persisting competent students.

APPENDIX A

PROTOCOLS 1-10

Protocol No. 1 Protocol Label--Surprise Birthday Party

Phase 1:

Area: Capacity for Apportioning Resources: Time

Dimension: A crowd context in which a choice of one of several alternatives for apportioning time to study for a final exam, which has been moved up is opposed by attendance at a party for which prior plans and preparations have been made.

Conflict: The conflict involves a choice of one of five alternatives for apportioning time to study for a final exam which has been advanced versus attendance at a potentially gratifying peer function. The alternatives are ordered on five levels of social responsibility ranging from high social responsibility (leaving the party to study) to low social responsibility (remaining at the party). The subject is asked to first rate each situational choice on a five-point scale, with equidistant points from high social responsibility (5) to low social responsibility (1), and then rank the same choices in terms of a hierarchy from high (5) to low (1) social responsibility. The choices from most to least responsible are: *

1. (E) The boy leaves to study while the party continues.
2. (A) The boy remains with the group since the party will end early.
3. (C) The boy participates with the group in one hour of study at the party.
4. (D) The boy justifies staying at the party by rationalizing that others aren't concerned about the exam.
5. (B) The boy forgets about the exam and remains at the party.

Context: A crowd context in which preparations for a surprise birthday party are interrupted by the announcement that a final examination has been moved up to the day following the party. A teen-age boy within the group is faced with resolving a conflict between the choice of one of five alternatives (ranging from internal to external) for apportioning his time for study or attendance at a potentially gratifying peer function.

Basic Setting: A large room has been partially decorated for a surprise birthday party. A banner stating "Surprise--Happy Birthday" is visible on the back wall. Colored streamers and balloons are visible room decorations.

* Note - Letters in parenthesis indicate the position in which the alternative was shown in the slide set.

Protocol No. 1 (Continued)

Characterization: The central character is a teen-age boy dressed in a red crew-necked sweater and blue slacks. The other characters in the successive scenes will be three teen-age boys dressed in V necked sweaters and slacks and three girls dressed in sweaters and skirts. The color of the sweaters and slacks for the boys and skirts for the girls should vary.

Scenes:

1. The three boys and three girls are depicted as having much fun. Two couples could be dancing and one couple standing together talking--holding soda bottles in their hands. A clock on the wall shows the time to be 8:00. The central character (boy in red crew-necked sweater and blue slacks) is depicted as leaving the party via the exit with books under arm. A thought balloon is above the boy with the following statement: "I've got to study for the exam tommorrow."

2. A split scene is needed. In the left half of the illustration the clock on the wall shows the time to be 7:30 p.m., and the party is in full swing. All are standing around with cokes and visiting. In the right half a clock on the wall shows the time to be 9:00. The three boys and three girls, plus the central character, are depicted leaving the party through the exit door. A thought balloon above the group contains the following: "We'll have some time to study for the exam tomorrow."

3. Split illustration is needed. In the left half of the illustration a clock on the wall shows the time to be 7:30 p.m. Sign below clock--"study time for tomorrow's exam at 7:30-8:30." The three boys, three girls, and the central character are seated on the floor of the party room with their books open and engaged in study. One boy and one girl could be pointing to some specific passage or illustration in the book. Right half of the illustration depicts the group engaged in the party--dancing, and discussion among couples (as in No. 4). A clock on the wall shows the time to be 8:30.

4. Party is in progress. Two couples are dancing. Central character (boy in red crew-necked sweater) is depicted talking with the other couples who are not dancing. These characters could be placed near the wall. A calendar on the wall shows a specific date--Monday--23--Month is not legible. Under date is note--Final Exam tomorrow. Clock on the wall shows the time to be 9:30. Thought balloon above central character--"The others are not concerned about the exam-why should I be?"

5. Party in progress. Three boys and three girls plus central character are in a group. All shown as thoroughly enjoying themselves. Calendar on the wall shows the same information as Scene 4--date--Monday--23--Month is not legible. Under date is note "Final Exam tomorrow." Clock on the wall shows the time to be 11:00.

Protocol No. 2 Protocol Label--Bikini Scene

Phase 1:

Area: Respect for Others' Rights: Beach Attire

Dimension: A crowd context in which a choice of one of several alternatives available to impose one's personal preferences for beach attire upon others is opposed by the need to respect the rights of others.

Conflict: The conflict involves the choice of one of five alternatives available to impose one's personal preference for beach attire upon girls versus the need to respect the rights of others in preferences for beach wear. The conflict situations are ordered on five levels of social responsibility ranging from high social responsibility (don't wear them (bikinis) if you are too shy) to low responsibility (don't wear them if you'd rather be square). The subject is first asked to rate each situational choice on a five-point scale with equidistant points from high responsibility (5) to low responsibility (1), and then rank the same choices in terms of a hierarchy from high (5) to low (1) social responsibility. The ranking has been made more difficult in this case in that three alternatives (D, A, and B) suggest reasons for not wearing the bikinis while two alternatives (C and E) suggest reasons for wearing them. The choices from most to least responsible are:

1. (D) Respecting the girls' modesty but also reflecting mild disapproval.

2. (A) Respecting consideration of parents.

3. (C) Confronting the girls with a promise they had made.

4. (E) Appealing to conformity to influence the girls.

5. (B) Using mild derision and coercion to influence the girls.

Context: A crowd context at a beach in which three girls, dressed in one-piece swim suits, are engaged in discussion with two boys who are holding bikini swim suits. A boy within the group is faced with resolving a conflict between the choice of one of five alternatives available for imposing his personal preference for girls' beach attire (bikinis) or maintaining respect for the rights of the girls to select the beach attire they feel appropriate.

Basic Setting: A beach scene with only sand in the foreground and a sign in the background with the words: "Bath House."

Characters: The central character is a brown-haired teen-age boy dressed in a black swim suit who is holding a girl's red bikini swim suit. The boy is depicted as suggesting that the girls wear this type of swim suit. The other character is a boy dressed in blue swim trunks and holding a

Protocol No. 2 (Continued)

girl's white bikini swim suit. The central character is located on the right-hand side of the illustration, while the boy in the blue swim trunks is on the left side of the illustration. Three girls, dressed in one-piece swim suits (one dark blue, one red, and one light blue) are located in the center of the illustration.

Scenes:

1. The two boys are shown holding the bikinis up. The central character has a balloon above him which contains the following message directed at the girls: "Don't wear them if you are too shy."

2. The two boys are depicted holding the bikinis and speaking to the girls. A balloon above the central character has the following message: "Don't wear them if you think your parents will care."

3. The two boys are depicted holding the bikinis while in conversation with the girls. A balloon above the central character contains the following message: "You said you'd wear them, here they are."

4. The two boys are depicted holding the bikinis. The balloon above the central character has the following message: "You said you'd wear them--the other girls are."

5. The two boys are depicted holding the bikinis while engaged in conversation with the girls. A balloon above the central character contains the following message: "Don't wear them if you'd rather be square."

Protocol No. 3

Protocol Label--Boy Confronted With Choice Between Study and Discussion About a Girl

Phase 1:

Area: Capacity for Apportioning Resources: Time

Dimension: A peer group context in which a choice of one of several incentives for applying oneself to a study task is opposed by a personal desire to acquire information about a girl from peer discussions.

Conflict: The conflict involves a choice of one of five incentives for applying oneself to a study task versus the personal need to acquire information about a girl from peer discussions. This information is eagerly sought to improve dating skills. The incentive situations are ordered on five levels of social responsibility ranging from high social responsibility (studies as part of long-range plans, e.g., studying to graduate) to low responsibility (study to avoid failure). The subject is asked to first rate each situational choices on a five-point scale, with equidistant points from high social responsibility (5) to low social responsibility (1), and then rank the same choices in terms of hierarchy from high (5) to low (1) social responsibility. The choices from high to low responsibility are:

1. (D) The boy studies as a part of long-range plans (studies to graduate).
2. (E) The boy takes pride in accomplishment (studies to improve grades).
3. (A) The boy studies to win the admiration of a girl.
4. (C) The boy studies because friends are going to study.
5. (B) The boy studies to avoid failure.

Context: A teenage boy is faced with resolving a conflict between the choice of one of five incentives (ranging from internal to external) for applying himself to a study task or securing needed knowledge about dating skills from peers.

Basic Setting: The location is the interior of a teenage restaurant. For the purpose of this illustration, it may be rather difficult to communicate this idea, but a table and other related props will help depict the setting. A circular table is present in the foreground of the setting; two empty malt cups with straws are on the table.

Protocol No. 3 (Continued)

Characters: Three basic characters will be involved in all five successive scenes with two additional characters in Scene 4. Two boys dressed in sweaters--one with a green V necked sweater on the left and a boy dressed in a white shirt and yellow jacket sweater are seated next to each other at the circular table. Both are holding empty malt cups. A vision balloon above the two boys indicates that they are discussing an attractive girl (with blonde hair and and wearing a green dress). The central character, dressed in a red crew-necked sweater is a teenage boy who has two books and a spiral notebook with him.

Scenes:

1. The central character (the boy in the red crew-necked sweater) with his books in hand is depicted as leaving the discussion. A two-part vision balloon is above the boy. The left-hand section of the balloon depicts the boy engaged in study, the right hand portion depicts him dressed in a cap and gown.

2. The central character (the boy in the red crew-necked sweater) with books in hand is depicted as leaving the discussion. A two-part vision balloon is above the boy. The left-hand section of the balloon depicts the boy engaged in study; he has a facial sign of pleasure; the right hand portion depicts a report card, showing the credit line to contain the rating--"Excellent."

3. The central character (the boy in the red crew-necked sweater) with books in hand is depicted as leaving the discussion. A two-part vision balloon is above the boy. The left-hand section of the balloon depicts the boy engaged in study; the right hand portion depicts the boy and girl (same girl as in vision balloon above the boys) comparing report cards. The girl states "Gee! Your grades are higher than mine."

4. The central character (the boy in the red crew-necked sweater) with books in hand is depicted as leaving the discussion. Two other teenage boys dressed in sweaters and slacks are depicted as walking by the central character (on his left). Boys are shown carrying textbooks. A word balloon above the two boys contains the following: "You had better come and study with us."

5. The central character (the boy in the red crew-necked sweater) with books in hand is depicted as leaving the discussion. A two-part vision balloon is above the boy. The left-hand section depicts the boy engaged in study; the right hand portion depicts a report card showing the credit line to contain the rating--"Failure."

Protocol No. 4 Protocol Label--Boy Seeing "Girlie Magazine" In the Street

Phase 1:

Area: Congruity with social expectations.

Dimension: A solitary context in which the incentives for picking up a "girlie magazine" (curiosity, sexual gratification) are countered by various degrees of inhibition resulting in the boy responding in one of three different ways after having picked up the magazine and in two different ways after having not picked it up.

Conflict: The conflict consists of wanting to pick up a "girlie magazine" (constituting an attractive temptation) versus countering various degrees of inhibition arising from possible censure for reading the magazine. The conflict situations are ordered on five levels of social responsibility ranging from high social responsibility (picking up the magazine and reading it openly) to low responsibility (anticipation of hiding the magazine and reading it furtively later) in terms of the amount and type of inhibition shown. The subject is first asked to rate each situational choice on a five-point scale with equidistant points from high responsibility (5) to low responsibility (1), and then rank the same choices in terms of a hierarchy from high (5) to low (1) social responsibility. The ranking has been made more difficult in this case in that three situations are shown on one gradient of the conflict in which the boy has picked up the magazine and is either reading it or considering doing so (Scenes 5, 4, and 1 below) and two situations are shown on the other gradient of the conflict in which the boy does not pick up the magazine (Scenes 2 and 3 below). The choices from most to least responsible are:

1. (C) Reading the magazine openly (no inhibition).

2. (E) Rejecting the magazine with an exaggerated sense of self-righteousness.

3. (D) Rejecting the magazine due to perception of parental censure.

4. (A) Reading the magazine self-consciously with signs of guilt.

5. (B) Considering hiding the magazine at home and reading it later.

Basic Scores: A street scene during a summer day. Two bushy trees and grass are visible in the background. A portion of the sidewalk and curbing is visible in the foreground. A magazine entitled "Naughty Nudies" is laying on the sidewalk on the lower left corner of the illustration. The front cover of the magazine contains the title of the magazine held up by a blond, bare-backed girl. The back cover contains a picture of the same girl (showing her backside) dressed in a black bikini.

Protocol No. 4 (Continued)

Character: A teen-age boy dressed in a red short-sleeved golf shirt and brown trousers is standing on the street just to the right of the magazine. The boy has a look of indecision on his face. In his right hand the boy has two books, while in his left, he holds a blue gym bag. A vision balloon is located to the right of the boy's left arm.

Scenes:

1. In the vision balloon, the boy is depicted as picking up the magazine and paging through it.

2. In the vision balloon, the boy is depicted as walking past the magazine (the magazine is still laying on the street behind him). The boy has a "halo" above him and a facial expression of "doing the right thing."

3. In the vision balloon, the boy is depicted as walking past the magazine (the magazine is still laying on the street behind him). Another vision balloon above the boy shows his father (his face engrossed in anger) tearing up a similar magazine.

4. In the vision balloon, the boy is depicted as picking up the magazine and paging through it with a facial expression of guilt (may be portrayed by blushing or other means).

5. In the vision balloon, the boy is portrayed in his bedroom hiding the magazine under some clothes in the top drawer of his dresser.

Protocol No. 5 Protocol Label--Girls' Pajama Party

Phase 1:

Area: Congruity with Social Expectations: Girls' Pajama Party

Dimension: A crowd context in which a choice of one of several alternatives specifying the conditions under which one might attend a girls' pajama party is opposed by the necessity to conform to societal norms, i.e., non-attendance at the party.

Conflict: The conflict involves the choice of one of five reasons for attending a girls' pajama party versus non-attendance, thus, generally conforming to societal expectations. The conflict situations are ordered on five levels of social responsibility ranging from high social responsibility (attendance when girl's parents are present) to low responsibility (attendance when only girls hosting the party are present). The subject is first asked to rate each situational choices on a five-point scale with equidistant points from high responsibility (5) to low responsibility (1), and then rank the same choices in terms of a hierarchy from high (5) to low (1) social responsibility. The choices from most to least responsible are:

1. (C) The boy attends the pajama party when parents of the girl are present.

2. (E) The boy attends the pajama party when other boys in the protagonist's group are present.

3. (A) The boy attends the pajama party to discuss a problem with a girl friend.

4. (D) The boy attends the pajama party when the neighbors are home.

5. (B) The boy attends the pajama party when only the girls hosting the party are present.

Context: A teen-age boy is faced with resolving a conflict between the choice of one of five reasons (ranging from high to low social responsibility) under which he might attend a girls' pajama party or not attend and thus conform to social expectations.

Basic Setting: An evening scene with a section of a home visible. For Scene 4, two homes will be used. The home should have visible a sidewalk up to the front door. A porch light is on above the door. Two picture windows are visible in the home. One picture window, to the right of the front door, is fringed with drapes (on the right end of the house facing the home next to it). A section of a neighboring home is visible on the right side of the illustration for Scene 4 only. A picture window (fringed with curtains) should be visible on the left end of this house.

Protocol No. 5 (Continued)

Characters: The central character is a teen-age boy dressed in a light-colored suit, blue slacks, and dark shoes. Three girls are dressed in pastel colored knee-length robes with pajama trousers protruding. One girl has her hair up in rollers.

Scenes:

1. The central character is depicted at the door of the home on the left. Three girls dressed in robes and pajamas are seated on the floor visible through the picture window facing the street. Two adults, visible through the picture window, are standing near the girls. One adult should be a male (the father) and the other adult a female (the mother).

2. The central character is depicted at the door of the home on the left. Three girls dressed in robes and pajamas and two boys dressed in dark-colored sweaters and slacks are seated on the floor visible through the picture window facing the street.

3. The central character is depicted at the door of the home on the left. A girl dressed in a robe and pajamas meets him at the door. Verbal balloon above girl. "Come in, Jim, I want to talk with you." Two girls dressed in robes and pajamas are visible through the picture window facing the street.

4. The central character is depicted at the door of the home on the left. Three girls dressed in robes and pajamas are seated on the floor and visible through the picture window facing the street. The outline of a man and woman are visible behind the curtains on the window of the neighboring home facing the window on the right end of the home.

5. The central character is depicted at the door of the home on the left. Three girls dressed in robes and pajamas are seated on the floor and visible through the picture window facing the street.

Protocol No. 6 Protocol Label--Boy Helping Parents With Fall Housecleaning While Friends Urge Him to Play Football

Phase 1;

Area: Maintenance Obligations: Family

Dimension: A family context in which a choice of one of several alternatives to completing or leaving an expected task is pitted against potential peer interaction.

Conflict: The conflict involves a choice of one of five alternatives relative to completing an expected task versus response to an urgent request by friends to join in a game of football. The situations are ordered on five levels of social responsibility ranging from high social responsibility (completion of the task by one's self before joining peers) to low responsibility (forsaking the task). The subject is first asked to rate each situational choice on a five-point scale with equidistant points from high responsibility (5) to low responsibility (1), and then rank the same choices in terms of a hierarchy from high (5) to low (1) social responsibility. The choices from most to least responsible are:

1. (E) The boy completes the task before leaving with peers.
2. (D) The boy requests his friends to help with the task.
3. (A) The boy requests his parents to help with the task.
4. (C) The boy postpones the task and leaves with peers.
5. (B) The boy forsakes the task for peer interaction.

Context: A teen-age boy is confronted with the conflict of choosing one of five alternatives ranging from self-effort, leading to completion of his part in fall housecleaning, to abandoning the task in response to urgent peer requests that he join them in a football game.

Basic Setting: Typical fall day with clear, bright sky. A portion of modest two-story home (constructed in the 1940's and painted white) is present. Left corner windows on the second story are in evidence. A wooden ladder with a bucket suspended near the top rung is set against the home reaching to the second story window. A portion of sidewalk to the left of the house is visible.

Protocol No. 6 (Continued)

Character: A teen-age boy (the central character) dressed in a pastel colored short-sleeve shirt and brown slacks is standing on the sixth from the top rung of the ladder with a cloth in his left hand and holding onto the window casing of the second floor window with his right hand. His head is turned to the left facing the street where two boys on the sidewalk are tossing a football. The boy on the left is dressed in a short-sleeve pastel colored shirt with brown denim slacks while the boy on the right is dressed in a blue shirt and brown slacks. The boy's father (middle-aged--about 40, dressed in work clothes--brown shirt and blue trousers) is depicted holding a broom rake. The mother (middle-aged--about 40) is holding onto the ladder.

Scenes:

1. The boy (central character) is standing on the sixth rung of the ladder with a cloth in his left hand and holding onto the window casing of the second floor window with his right hand. His head is turned toward the left facing the street where two boys on the sidewalk are tossing a football. A balloon above the boy (central character) contains the following message: "As soon as I finish my job!" The boy's father and mother are depicted as described in the character section.

2. This scene will be basically the same as Scene 1 with the exception that the response of the boy (central character) on the ladder will be: "Why don't you help me finish this job?"

3. The scene will be basically the same as Scene 1 with the exception that the boy (central character) is looking down at his parents. The response of the boy will be: "Mom and dad, will you help me finish up?"

4. The scene will be basically the same as Scene 1 with the exception that the boy is starting down the ladder. A thought balloon above the boy (central character) contains the following: "I'll finish this job after the game."

5. The scene will be basically the same as Scene 1 with the exception that the boy (central character) is at the bottom of the ladder. A thought balloon above the boy contains the following: "This job can wait."

Protocol No. 7 Protocol Label--Boy In Conflict About Reading A "Girlie Magazine" At Drugstore Magazine Rack

Phase 1:

Area: Congruity with social expectations

Dimension: A social context where an opportunity to pick up a "girlie magazine" at a drugstore magazine rack is countered by exercise of self-control deriving from both internalized restraints and restraints arising from perception of external deterents.

Conflict: The conflict consists of wanting to pick up a "girlie magazine" (constituting an attractive temptation) vs. the exercise of self-restraint in not picking it up. The conflict situations are ordered on five levels of social responsibility ranging from high social responsibility (not picking up the magazine due to reflection of parental admonition) to low responsiblity (showing self-restraint in the presence of an "adults only" sign). The subject is first asked to rate each situational choice on a five-point scale with equidistant points from high responsibility (5) to low responsibility (1), and then rank the same choices in terms of a hierarchy from high (5) to low (1) social responsibility. The choices from most to least responsible are:

1. (A) Showing self-restraint by not picking up the magazine due to reflection of parental admonition.

2. (C) Showing self-restraint by not picking up the magazine due to the knowledge of a civic campaign being waged against such magazines.

3. (D) Showing self-restraint in the presence of a teacher at the far end of the magazine rack.

4. (B) Showing self-restraint in the presence of a girl at the far end of the magazine rack.

5. (E) Showing self-restraint in the presence of a sign saying "adults only."

Context: Five situations are shown in which a teen-age boy is depicted in conflict about whether or not to pick up a "girlie magazine" in a drugstore--but in each situation showing self-restraint.

Basic Setting: A long drugstore magazine rack is reflected in a mirror behind it. Two rows of magazines are shown--(reversed in mirror) *Time*, *Life*, *Sport* (to the left). Titles and covers should be blurred to eliminate distraction. A number of "girlie magazines" are shown to the right in the mirror. These have titles of *Yoo-Hoo*, *Girlie*, and *PEEK*. The covers of these should be suggestive of "girlie magazines" and should be more prominent but not too provocative.

Protocol No. 7 (Continued)

Characterization: A teen-age boy in a long-sleeved shirt and blue sweater is shown facing the magazine rack. He holds an open copy of a news magazine with straight black lines suggesting lines of print reflected in mirror. His eyes are turned toward the "girlie magazines" indicating conflict regarding picking them up.

Scenes:

1. Showing self-restraint due to reflection of parental admonition. This is shown by a vision balloon to the left above the boy (partially blocking magazines). In the balloon a middle-aged man is shown angrily throwing a copy of Girlie (use same cover) in a waste basket. The man is dressed in a green sweater and dark slacks and smoking a pipe.

2. Showing self-restraint due to knowledge of a civic campaign against "Girlie magazines." This is shown by a vision balloon above the boy depicting the headlines of the "Times" which states: "Mayor Declares War on Girlie Type Magazines."

3. Showing self-restraint in the presence of a teacher. This is shown by a teacher dressed in a brown suit (wearing glasses) standing at the far end of the magazine rack. The teacher is carrying a brown brief case with the monogram K.H.S. in his right hand and a book, with the title "Math" in his left hand.

4. Showing self-restraint in the presence of a girl at the other end of the magazine rack. This is shown by the same basic setting described above except that a teen-age girl in a blue sweater and white skirt is shown to the left of the boy (but at some distance from him) looking toward the boy.

5. Boy shows self-restraint in presence of a sign saying "Adults Only." This is shown by the same basic setting and characterization described above except that above the right hand side of the magazine rack containing the "girlie magazine" is a sign saying "Adults Only" in prominent black block letters.

Protocol No. 8 Protocol Label--Conflict Between Car Polishing and Studying

Phase 1:

Area: Capacity for Apportioning Resources: Time

Dimension: A solitary context in which a choice of one of several alternatives for apportioning time to study tasks is opposed by the desire to maintain the appearance of one's car.

Conflict: The conflict involves the choice of one of five alternatives for apportioning time between study tasks versus complete usage of time for maintaining the appearance of one's car. The alternatives are ordered on five levels of social responsibility ranging from high social responsibility (perform methodical job on studies, then polish car) to low social responsibility (study while polishing car). The subject is asked to first rate each situational choice on a five-point scale, with equidistant points from high social responsibility (5) to low social responsibility (1), and then rank the same choices in terms of a hierarchy from high (5) to low (1) social responsibility. The choices from most to least responsible are:

1. (E) The boy performs a methodical job on his studies uncompleted, and then polishes his car.

2. (C) The boy studies for one hour, leaving his studies uncompleted, and then polishes his car.

3. (D) The boy neglects his studies and concentrates on car polishing to win a prize.

4. (B) The boy daydreams while studying.

5. (A) The boys studies while polishing his car.

Context: A teen-age boy is faced with resolving a conflict between the choice of one of five alternatives (ranging from internal to external) for efficient budgeting of his time for study requirements of maintaining his car's appearance.

Basic Setting: Three basic settings are required for this series of illustrations. The first basic setting will be applicable to one-half of Scenes 1 and 2 and all of Scene 4 with the second setting covering one-half of Scene 1 and 2 and all of Scene 5 and the third setting applying only to Scene 3.

Protocol No. 8 (Continued)

First Setting: The interior of a modest home is portrayed. A rectangular study table, on which three textbooks, one of which is open, scattered papers, and a notebook, are present. A study lamp is centered near the back edge of the table.

Second Setting: A typical summer day with portions of a blue sky in evidence. The left front half of a one-story home painted in a shade of gray is visible in left background. A black 1950 model car is parked at the street curbing.

Third Setting: A typical summer day with portions of a blue sky in evidence. A black 1950 model car is parked at the street curbing.

Character: The central character is a blonde teen-age boy dressed in a short-sleeved golf shirt with blue slacks (if slacks need to be depicted in scenes).

Scenes:

1. Split scene. Left half of scene depicts boy engaged in study. Vision balloon above the boy depicts him seated in a classroom chair receiving an exam paper marked "A" from the teacher (middle-age male dressed in a dark suit). The right half of the scene depicts the boy polishing a car. Polish cloths are in each hand of the boy and a can marked "wax" is resting on the hood.

2. Split scene. Left half of scene depicts boy engaged in study. The clock on the study desk shows the hour to be 1:00. The right half of the scene depicts the boy engaged in polishing his car. Polish cloths are in each hand of the boy and a can marked "wax" is resting on the hood. A clock above the house shows the hour to be 2:00.

3. Boy is depicted as busily polishing his car. Polish cloths are in each hand of the boy and a can marked "wax" is resting on the hood of the car. A vision balloon above the boy depicts him standing next to his car (the car is depicted as showing a high gloss) receiving a blue ribbon from an older-appearing teen-ager dressed in a short-sleeved golf shirt and dark slacks. A banner in the background has the following words: "Auto Club."

4. The scene depicts the boy seated at his study desk staring off into space dreamily. A blank vision balloon is above him.

5. Boy is depicted as busily polishing his car while attempting to study from a textbook--(math)--which is resting on the hood of the car in front of him. Polish cloths are in each hand of the boy, and a can marked "wax" is resting on the hood of the car.

Protocol No. 9 Protocol Label--Boy Dating a Plain Girl

Phase 1:

Area: Respect for others' rights --Dating

Dimension: A dating context where a boy is seen dating a plain, slightly unattractive girl in five situations. The fact that she is plain is opposed by five reasons for the boy dating her ranging from respect for her to various degrees of exploitation of the relationship.

Conflict: The conflict consists of using as reasons for dating a plain, slightly unattractive girl, the receipt of various degrees of personal gain versus maintaining respect for the girl. The situations are ordered on five levels of social responsibility ranging from high social responsibility (dating the girl for ego building) to low responsibility (dating the girl for purely exploitive reasons, help with homework). The subject is asked to first rate each situational choice on a five-point scale with equidistant points, as to how socially responsible the reason for dating the girl appears to be, and then to rank the same choices in terms of a hierarchy, ranging from 5 to 1. The choices from most to least responsible are:

1. (D) The boy dates the girl to build his ego (he feels more comfortable with her than with other girls).

2. (E) The girl helps the boy with his dress, and he in turn shows her a new dance.

3. (A) Reciprocity--the girl helps the boy with his homework, and he teachs her how to bowl.

4. (B) The boy dates the girl for status (i.e., being seen with the girl for personal gain).

5. (C) The boy dates the girl only to get help with his homework (purely exploitive).

Context: A teen-age boy is shown in five dating situations with a plain, slightly unattractive girl.

Basic Setting: No setting is applicable to all five scenes and thus is eliminated for this series.

Characters: The central characters are a teen-age boy and girl. Their dress will vary depending upon the situations called for in the various scenes. The girl should be portrayed as rather plain-appearing--perhaps with freckles or acne visible.

Protocol No. 9 (Continued)

Scenes:

1. Split scene. Left half of scene depicts central character--teen-age boy--walking down a street with an attractive girl. Boy is portrayed as exhibiting signs of uneasiness or being quite uncomfortable. Boy is dressed in blue sweater and slacks. Girl is dressed in blue dress. Right half of scene depicts central character, the teen-age boy walking down street with other central character, the plain-appearing girl. The boy is portrayed as smiling (beaming), his chest protruding and displaying overt signs of general pleasure. Boy is dressed in same blue sweater and slacks as depicted in the left portion of the split scene. Girl is wearing a yellow turtle-necked sweater and a brown skirt.

2. Central Characters--teen-age boy and plain-appearing teen-age girl--are depicted at a dance. Show two other teen-age couples--boys dressed in sport coats, ties, dark slacks, girls in party dresses of various colors--dancing. Central character boy is also dressed in suit, and girl is dressed in a party dress. Depict central characters as about to dance. Verbal balloon above boy--"You helped pick out the tie--now I'll show you how to do this dance."

3. Split scene. Left portion shows central characters--boy dressed in a dark sweater and slacks, girl in a light sweater and skirt. Both are seated at a table. The girl is working at a school assignment and appears to be showing the boy how to do the assignment. The boy is looking on intently. A verbal balloon above the girls contains the following message: "Here, I'll show you." The right portion shows the central characters (dressed in the same manner) at a bowling alley. The boy is showing the girl how to hold the bowling ball (placing her fingers in the ball to get the proper grip). A verbal balloon above the boy contains the following message: "You hold the ball this way."

4. Depict the central characters as walking down the hallway of a school. School lockers could be present on both sides of the hallway. Boy is dressed in a long-sleeved shirt (colored) and dark slacks. Girl is dressed in a white blouse and dark skirt. Three teachers (two males and one female) are shown looking at the couple approvingly. A thought balloon above the boy contains the following message: "This should get me points with the teachers."

5. Depict the central characters seated at a table. The boy is dressed in a dark sweater and slacks, the girl in a light-colored sweater and slacks. The girl is diligently engaged in doing homework while the boy seated near by has a distant facial expression. A vision balloon above the boy depicts a very attractive girl (the same girl as in Scene 1).

Protocol No. 10 Protocol Label--Boy Daydreaming While Studying

Phase 1:

Area: Capacity for Apportioning Resources: Time

Dimension: A solitary context in which a choice of one of several incentives for diligent study is opposed by a daydream reflecting the boy's desire to watch television. The incentives arise from contemplation of a range from long-term rewards to more immediate rewards for studying.

Conflict: The conflict consists of the contemplation of rewards to be obtained by application to study versus wanting to watch television. The incentive situations are ordered on five levels of social responsibility ranging from high social responsibility (studying for a long term goal, e.g., graduation) to low responsibility (studying for more immediate reasons e.g., due to a restriction imposed by his father. The subject is asked to first rate each situational choice on a five-point scale with equidistant points, from high social responsibility (5) to low social responsibility (1), and then rank the same choices in terms of a hierarchy from high (5) to low (1) social responsibility. The choices from most to least responsible are:

1. (E) The boy wants to graduate and thinks of graduation and his future.
2. (B) The boy is thinking of poor grades and how he can improve them.
3. (A) The boy is thinking about studying to win his father's approval.
4. (D) The boy is thinking about a payment promised him by his father if he can improve his grades.
5. (C) The boy is thinking about his father who has made him study for a certain period of time by placing restrictions on him.

Context: Five situations are shown in which a teen-age boy is depicted in conflict between watching television to avoid studying or returning to his studies for given incentives.

Basic Setting: A blond teen-age boy in a brown turtleneck sweater is shown sitting in a black straight-backed chair at a round table. On the table are two closed books (untitled) on the right and a sheet of paper before the boy. Background is left blank. There are two vision balloons shown in each scene as described below.

Characterization: The boy has an open book and a sheet of plain white paper before him. A pencil in his right hand rests on the paper. The boy is shown staring off into space dreamily. Above the boy to the left in each picture is a vision balloon showing a television screen with a sports stadium. To the right above the boy is a second vision balloon showing the conflicting motivation for returning to his studies as described below.

Scenes: Each with the basic setting described above. The description of the vision balloon above the boy to the right follows:

1. Shows the same boy in black cap and gown holding a diploma and beaming with pride.

2. A card is shown with three or four lines suggestive of a report card. On the bottom the word POOR is prominent. Below the card is the boy's thought: "I've got to study."

3. The same boy is shown studying with his head bent over a book at the table. His father, a middle-aged man in a long-sleeved shirt, is shown in the background behind him beaming and looking proud of his son.

4. The same boy and his father (as described in #3) stand together. The father is to the left of the boy. The boy holds a report card with a "A" at the bottom. The boy and his father look quite proud. The father is handing his son two green dollar bills with his right hand.

5. A vision balloon is shown of the father saying, "You have to study before you do anything else!"

APPENDIX B

PICTURE SETS 1-10

Picture sets have not been duplicated. Black and white reproductions of the ten picture sets have been deposited with the University of Wisconsin Memorial Library in the original copy of the Master's thesis.

APPENDIX C

RANK ORDERING AND WEIGHTING OF SLIDE SET ALTERNATIVES

Appendix C

Rank Ordering Assigned to Each of the Ten Composite Stimulus Illustrations Based on the Standard Ordering with the Corresponding Weighting System for Each Alternative

Rationale No. 1 Rationale Label--Surprise Birthday Party

			Weight Assigned When Respondent's Rank is:				
Alternative	Description	Rank	1	2	3	4	5
A	Study One Hour--Then Continue Party	4	2	3	4	5	4
B	Hold Party--Forget About Study	2	4	5	4	3	2
C	End Party Early, Then Study	3	3	4	5	4	3
D	Others Don't Care About Exam--Why Should I?	1	5	4	3	2	1
E	Leave Party to Study	5	1	2	3	4	5

Rationale No. 2 Rationale Label--Bikini Scene

			Weight Assigned When Respondent's Rank is:				
Alternative	Description	Rank	1	2	3	4	5
A	Don't Wear If Parents Object	4	2	3	4	5	4
B	Don't Wear If You Want To Be A Square	1	5	4	3	2	1
C	You Promised To Wear Them	3	3	4	5	4	3
D	Don't Wear If You Are Too Shy	5	1	2	3	4	5
E	Other Girls Are Wearing Them	2	4	5	4	3	2

Rationale No. 3 Rationale Label--Boy Confronted With Choice Between Study Or Discussion About A Girl

			Weight Assigned When Respondent's Rank is:				
Alternative	Description	Rank	1	2	3	4	5
A	Girl States "Your grades are higher"	2	4	5	4	3	2
B	Fear Of Failure	1	5	4	3	2	1
C	Study With Friends	3	3	4	5	4	3
D	Study For Graduation	4	2	3	4	5	4
E	Study To Improve Grades	5	1	2	3	4	5

Appendix C (Continued)

Rationale No. 4 Rationale Label--Boy Seeing "Girlie Magazine" In The Street

Alternative	Description	Rank	Weight Assigned When Respondent's Rank is:				
			1	2	3	4	5
A	Read Magazine With Sense Of Guilt	2	4	5	4	3	2
B	Hide Magazine In Dresser	1	5	4	3	2	1
C	Read Magazine With Satisfaction	3	3	4	5	4	3
D	Reject Magazine Due To Father's Disapproval	4	2	3	4	5	4
E	Walk By Magazine	5	1	2	3	4	5

Rationale No. 5 Rationale Label--Girl's Pajama Party

Alternative	Description	Rank	Weight Assigned When Respondent's Rank is:				
			1	2	3	4	5
A	Boy Invited In By Girl	3	3	4	5	4	3
B	Boy Thinks Of Entering When Girls Are Alone	2	4	5	4	3	2
C	Boy Thinks Of Entering When Girl's Parents Are Present	5	1	2	3	4	5
D	Boy Thinks Of Entering When Neighbors Are Watching	1	5	4	3	2	1
E	Boy Thinks Of Entering When Other Boys And Girls Are Present	4	2	3	4	5	4

Rationale No. 6 Rationale Label--Boy Assisting Parents With Family Maintenance

Alternative	Description	Rank	Weight Assigned When Respondent's Rank is:				
			1	2	3	4	5
A	Ask Parents Help	3	3	4	5	4	3
B	Postpone Task Indefinitely	1	5	4	3	2	1
C	Finish Task After Game	2	4	5	4	3	2
D	Ask Friends To Help	4	2	3	4	5	4
E	Finish Task, Then Play Ball	5	1	2	3	4	5

Appendix C (Continued)

Rationale No. 7 Rationale Label--Boy In Conflict About Reading A "Girlie Magazine" At Drugstore Magazine Rack

Alternative	Description	Rank	Weight Assigned When Respondent's Rank is:				
			1	2	3	4	5
A	Showing Self-restraint Because Of Father's Disapproval	5	1	2	3	4	5
B	Showing Self-restraint Because Girl Is Present	2	4	5	4	3	2
C	Showing Self-restraint Because Of Civic Campaign Against Magazine	4	2	3	4	5	4
D	Showing Self-restraint Because A Teacher Is Present	3	3	4	5	4	3
E	Showing Self-restraint In Presence Of An Adult Only Sign	1	5	4	3	2	1

Rationale No. 8 Rationale Label--Boy Polishing His Car While Thinking About His Studies

Alternative	Description	Rank	Weight Assigned When Respondent's Rank is:				
			1	2	3	4	5
A	Study While Polishing Car	1	5	4	3	2	1
B	Daydreaming While Studying	2	4	5	4	3	2
C	Study One Hour, Then Wax Car	4	2	3	4	5	4
D	Polish Car For A Prize	3	3	4	5	4	3
E	Study For An "A" Exam, Then Polish Car	5	1	2	3	4	5

Rationale No. 9 Rationale Label--Boy Dating A Plain Girl

Alternative	Description	Rank	Weight Assigned When Respondent's Rank is:				
			1	2	3	4	5
A	Girl Assists With Study, Boy Shows Girl How To Bowl	5	1	2	3	4	5
B	Boy Dates Plain Girl To Impress Teachers--Gain Status	1	5	4	3	2	1
C	Boy Dates Girl Only To Help Him With Homework	2	4	5	4	3	2
D	Boy Dates Plain Girl To Build His Ego	3	3	4	5	4	3
E	Girl Helps Boy With Dress, Boy Shows Girl New Dance Technique	4	2	3	4	5	4

Appendix C (Continued)

Rationale No. 10 Rationale Label--Boy Daydreaming While Studying

Alternative	Description	Rank	Weight Assigned When Respondent's Rank is:				
			1	2	3	4	5
A	Study For Father's Approval	2	4	5	4	3	2
B	Fear Of Failure	3	3	4	5	4	3
C	Study Because Of Father's Restriction	4	2	3	4	5	4
D	Study For A Payment Of Money	1	5	4	3	2	1
E	Study To Graduate	5	1	2	3	4	5

APPENDIX D

INSTRUCTIONS TO SUBJECTS

THE SOCIAL RESPONSIBILITY RATING SCALE

Instructions and Test Procedures:

A copy of the rating scale and a test booklet in which to record their responses were distributed to all subjects. Subjects were given the following instructions:

> We are conducting research on the attitudes and opinions of high school boys on social responsibility. You will be shown several sets of pictures--ten in all. Each set has five pictures showing different ways of responding or acting in the same situation. Each shows a different reason for the boy acting as he does in the situation. Some of these situations are more responsible than others. Your task is to rate each picture of each set on a scale, indicating how responsible or irresponsible you think each of the choices are.
>
> Notice that the scale has five positions--1, 2, 3, 4, and 5. Notice also that 1 and 2 on the left side of the scale are used to mark choices that you think are irresponsible. The right side of the scale--4 and 5--is used for marking those choices that you think are responsible. The middle of the scale, 3, is to be used if you think a choice is in between. However, most boys your age can usually decide one way or the other. The middle position should be used only when you can't make up your mind.
>
> Now look at your answer sheet (but do not mark on it yet). Notice at the side of the sheet that there are five rows marked A, B, C, D, and E. These large letters refer to each of the five pictures of the set. The five pictures will always be in the same order with A and B on the top, and C, D, and E on the bottom. Following each of these large letters are the numbers 1-5 which refer to the five positions on the rating scale. The number at the top of the page refers to the set.
>
> Let's look at an example--just for practice. (Show example.) Notice there are five pictures--each lettered A, B, C, D, and E. Look at all five pictures before circling your choice. Try to decide what the problem is for the boy and why he acts as he does. Now go to your answer book. The first page says "Example." Look at choice A and circle the number from the scale you have been given. If you think this is very irresponsible in relation to the other four, circle number 1. If you think it is irresponsible, but less so, circle number 2. If, on the other hand, you think

> this is very responsible, you would circle number 5. If you think it is responsible, but less so, circle number 4. If you are completely unable to make up your mind, circle number 3. Now go to picture B and rate it. Then do pictures C, D, and E.
>
> Do you have any questions? If not, we are ready to proceed. You will be given an equal amount of time to view each set. When the time is ended, you will be notified and the next set of pictures will be projected on the screen.

Upon completion of the rating portion of the test, the subjects received the following instructions:

> Part two of this research is intended to see if differences exist in different systems used to rate these pictures. Instead of rating each picture of the set as you have just done, we would now like you to rank order the five alternatives in each set from the most to the least responsible alternative available to the boy in each situation. The numeral 5 should be given to the alternative you consider most responsible and the numeral 1 to the alternative you consider least responsible. Next, decide which alternative is next most responsible and give it a 4. Then decide which alternative is next most irresponsible and give it a 2. The remaining alternative will receive the numeral 3 or the middle position. Each of these ranks should only be used once in a set. Make certain you base each ranking on all of the pictures within each set.

An example and demonstration of the ranking procedure were presented on the classroom blackboard following the explanation. Following this explanation, the subjects viewed the ten slides in the randomly rearranged order previously reported. Ninety seconds viewing time for each slide gave the subjects sufficient time to complete each ranking. Upon completion of part two, the subjects were thanked for their assistance and requested not to discuss the test with any other students during the day.

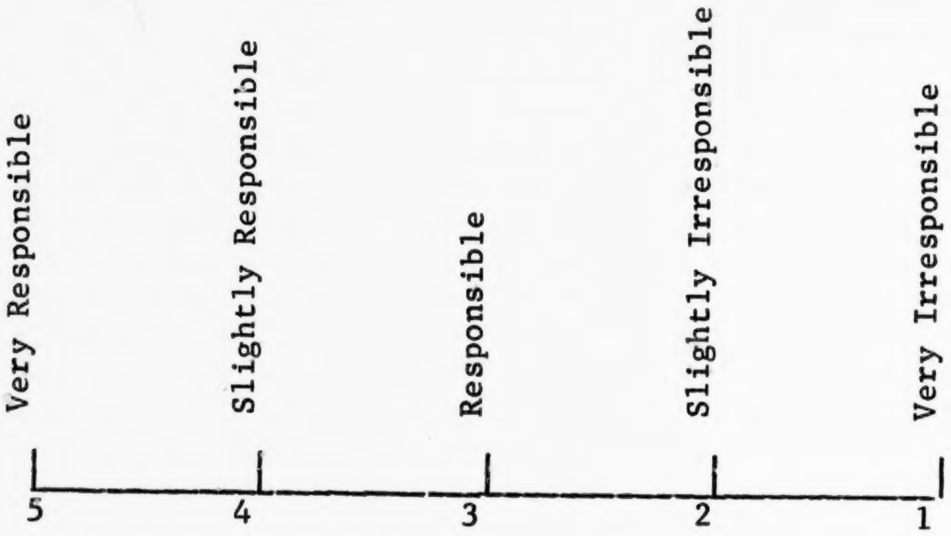

Very Responsible
Slightly Responsible
Responsible
Slightly Irresponsible
Very Irresponsible
5
4
3
2
1

Figure D-1

Social Responsibility Rating Scale

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